

tappel

C. R.

.

.

š

FLORA OF YORKSHIRE.

Digitized by the Internet Archive in 2017 with funding from BHL-SIL-FEDLINK

THE

FLORA OF YORKSHIRE.

WITH TWO PLATES.

(maps)

BY HENRY BAINES,

SUB-CURATOR TO THE YORKSHIRE PHILOSOPHICAL SOCIETY.

LONDON:

LONGMAN, ORME, BROWN, GREEN AND LONGMAN;
LEYLAND AND SON, HALIFAX.
1840.

9K





PREFACE.

The Botanical riches of Yorkshire are little known to the public at large; though not a few scientific and many practical botanists have diligently explored almost every part of the district. The general Catalogues of British Plants omit all notice of many of the rare species found in this county, and it is difficult to gather from the published Lists of Local Floras a satisfactory view of the distribution of even the most remarkable flowers.

In addition to these considerations, the circumstance that the Author has resided all his life in Yorkshire, and prosecuted botanical researches in it for nearly thirty years, may be thought a sufficient apology for his entering on a task which could only be properly performed by a resident Botanist, with the assistance of kind and diligent friends. That assistance has been so promptly and perseveringly afforded, by persons of eminent Botanical knowledge, that the Author would be at a loss to acknowledge in suitable terms the great favours he has received, did he not perfectly know that the pleasure of contributing to complete a Catalogue of Yorkshire Plants, by whomsoever begun, will be esteemed by these friends of science the best and most gratifying reward.

He might, however, have been compelled to delay for years the preparation of this Work, but for the circumstance that his connexion with the Yorkshire Philosophical Society placed at his disposal probably the most perfect herbarium of Yorkshire Plants ever formed, comprised of the united collections of three most eminent Botanists,—James Backhouse, Esq. of York; the Rev. James Dalton, of Croft Rectory; and W. Middleton, Esq. of Poppleton Lodge; and augmented by additions of rare species by the Rev. W. Hincks, who commenced a complete arrangement of the whole according to the Natural Orders.

No sooner had he declared his intention of preparing a general Catalogue of Yorkshire Plants, than the Author received from Mr. Hincks and Professor Phillips immediate and valuable aid. To the latter the reader is indebted for the preliminary essay; and the former, besides revising the Work as it proceeded, till his removal from York, prepared with great labour an original and valuable Series of Analytical Tables, expressly adapted to the Natural Orders of British Plants, which nothing but the cost of printing has prevented the Author from prefixing to this volume.

The Philosophical Institution of Sheffield, by giving free access to the well known herbarium of Mr. Jonathan Salt, and other collections, materially assisted the Author's views; and a similar acknowledgment is due to the Hull Literary and Philosophical Society. To Mr. S. Gibson, of Hebden Bridge, the Catalogue is under great obligations, not only for the free communication of his discoveries, especially in Cryptogamic Botany, but also for his attention to the general completeness of the Work.

To Samuel Hailstone, Esq. of Croft House, Bradford, the Author is grateful for abundant information, specially regarding the Plants of Thorp Arch and Craven, and still more for the benefit of his unrivalled knowledge of Rubi, Roses, &c.

For extensive Lists of Plants observed growing in particular districts

of Yorkshire, in addition to the valuable co-operation above specially referred to, the Author is indebted to the following Botanists.

Mr. J. Ward.-List of Plants in the vicinity of Richmond.

Mr. J. Sanderson.—Another from the same district.

Mr. Joseph Fryer, of Swinton.-List of the Plants of Mashamshire.

Mr. J. Tatham, jun.—List of the Plants in the rich district round Settle.

Mr. Benjamin Thompson.—Notices relating to the same district.

Rev. J. S. Howson.—List of the Plants near Giggleswick.

Mr. H. Denny.-List of the Plants in the Leeds district.

Mr. J. Nowell, of Todmorden, a most indefatigable and accurate Cryptogamic Botanist, much valuable information on the Mosses.

Rev. R. Bunch, Emanuel College, Cambridge.—List of Plants near Wakefield.

Rev. B. Eamonson.-List of Plants near Bramham.

Mr. Fuller.-List from the same district.

Rev. W. Gray.—List of Plants near Brafferton.

Late Dr. Wasse.-List of Plants near Thirsk.

Thos. Thornbourn, Esq.—List of Plants near Kirby Moorside.

Mr. R. Spruce.-List of Plants near Ganthorpe and Castle Howard.

Mr. David Smith.-List of Plants near Hull.

Mr. Lovell Squires.—List of Plants growing near York.

Mr. Oswald Allen Moore has contributed to complete the Lists for the vicinity of Doncaster, York, and other districts; Mr. Giles Munby, Mr. Allis, and Mr. John Williamson, of Scarborough, have furnished information regarding several interesting plants and particular localities.

Mr. R. Marnock.—List of Plants near Sheffield.

Mr. Ibbetson, Schoolmaster, Drumington.-Various localities.

From all these various sources, the Catalogue has been constructed. The Author is, however, by no means desirous that it should be received by the readers as complete. Several considerable districts appear as yet

but imperfectly explored, and it is very probable that some additional plants and many new localities will reward well directed enquiry.

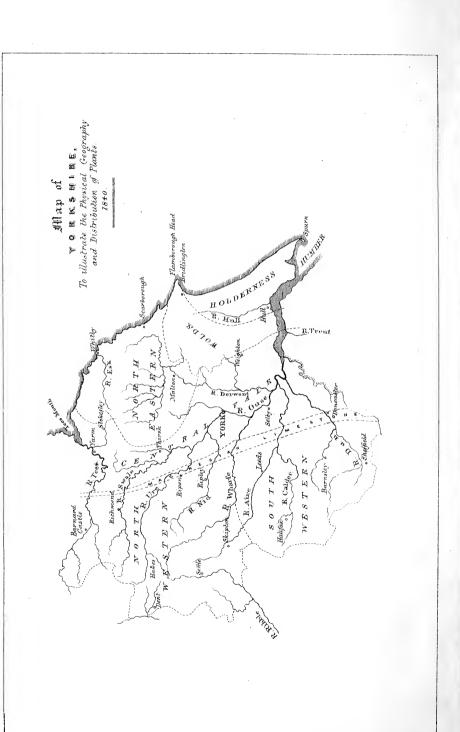
Even while the last sheets were passing through the press, Mr. Gibson, Dr. Lankester, and Mr. Moore, furnished Addenda which are introduced at the end of the Catalogue.

The rare Schistostega pennata has also, during the last month, been added to the List of Mosses, by Mr. John Nowell and Mr. John Howarth, of Todmorden.

That many more curious discoveries remain to gratify the diligent Botanist who ventures beyond the ordinary road into the more secluded districts of Yorkshire, can scarcely be doubted, and perhaps the present record of localities of known plants may in some degree contribute to stimulate research. Having used all the means and exertions in his power to furnish a faithful guide to the present amount of knowledge, the Author trusts that reasonable allowance will be made for any errors or imperfections which may be observed in his work; and he hopes that the numerous friends without whose aid it would have presented a very different appearance, will still continue their kind attention, and by correcting and improving the Catalogue now offered to their notice, gradually render it a complete representation of the rich Flora of Yorkshire.

York, September 1st, 1840.





PHYSICAL GEOGRAPHY OF YORKSHIRE.

To determine the laws which regulate the distribution of organic life upon the globe, is a problem requiring for its solution a precise knowledge of the vast variety of local conditions which interfere with the governing elements of climate, and modify the habitudes of plants and animals. Differences of soil and elevation; unequal exposure to light, air and the vapours of fresh or salt waters; these, and many other circumstances, predominate over the general influence of temperature, and enable the productions of different latitudes to flourish side by side in a narrow region of the surface of the earth. Moreover, if due allowance can be made for all these causes of local difference and resemblance, there still remain, both in botany and zoology, multitudes of facts not in this manner explicable; solitary groups of plants in the recesses of the mountains; peculiar shells and fishes in the streams; birds and insects self-confined in limited tracts of the air.

It would be too much to expect in a local fauna or flora more than a small contribution toward the knowledge of the distribution of plants and animals; yet it is upon the evidence contained in such local surveys alone that comprehensive inferences can be securely founded. In them the philosophic contemplator of nature ought to find exact if not complete data for correct reasoning; and if the districts be well chosen, not too limited in area, nor too uniform in physical constitution, conclusions of general value may be safely proposed upon an adequate basis of observed facts. Yorkshire is such a district, and if in this little work we have not ventured far in a path which requires much Philosophical as

well as Botanical knowledge, we are desirous of aiding the efforts of others by presenting a sketch of the external features and internal structure of the country which has been surveyed.

It is not merely because of its large geographical area that Yorkshire is more rich in vegetable forms than most other English Counties: its surface exhibits several distinct characters of soil and stratification, accompanied by gradations of elevation, from the sea shore to mountains of 2,400 and even 2,600 feet high; its climate varies accordingly, and it lies in such a geographical position as to unite, in a considerable degree, the characters of Scottish and English vegetation.

The mean temperature of York, which is about 50 feet above the sea, is very nearly 48° F. and there is little variation in different parts of the County, except what unequal elevation above the sea occasions. The effect of this on Mickle Fell, the highest mountain in Yorkshire, may be estimated at 8° of Fahrenheit, so that the extremes of mean temperature in Yorkshire vary from 40° to 48°. From similar data we may state the range of highest mean daily temperature, in the shade (in July) at from 54° to 62°; and the range of lowest mean daily temperature (in January) at 25° to 33°. The most prevalent winds are south-easterly, during all the year, excepting about a month after the vernal equinox, when, in all the eastern parts, north-easterly winds prevail. The quantity of rain falling at York is 24 inches, and it is below the average of the County, of which the western parts are the most rainy.

Of 1002 flowering Plants noticed in the following Catalogue, only three are peculiar to Yorkshire, viz.

Arabis hispida—page 13.
Dryas octopetala—page 38.
Juncus polycephalus—page 109.

One, not peculiar to the County, flowers no where else in England, viz.

Cornus suecica—page 52.

Twelve attain in Yorkshire their southern limit, viz.

Actæa spicata
Potentilla fruticosa*
Rosa sarmentacea
Sedum villosum*
Ribes petræum*
Saxifraga umbrosa

Saxifraga hirculus* Gentiana verna* Bartsia alpina* Rhinanthus major Trientalis Europæa Tofieldia palustris*

It is interesting to observe that of these the greater proportion, marked by the asterisk, occur only in the most northerly and mountainous districts of the County. Thirty-seven attain in Yorkshire their northern limit, viz.

Anemone Pulsatilla Hutchinsia petræa Dianthus Caryophyllus Silene Otites - nutans Arenaria tenuifolia Radiola Millegrana Hypericum Androsæmum Trifolium ornithopodioides Lathyrus latifolius Rubus rhamnifolius --- leucostachys — macrophyllus Rosa micrantha Sedum dasyphyllum - sexangulare Cotyledon umbilicus Campanula patula - ĥederacea

Campanula rapunculoides Scrophularia vernalis Galeobdolon luteum Stachys germanica Mentha acutifolia Nepeta cataria Teucrium Scordium Orobanche minor Hippophäe rhamnoides Scheuchzeria palustris Epipactis palustris Crocus nudiflorus Ornithogalum umbellatum Typha angustifolia Acorus calamus Lemna gibba — polyrhiza Cuscuta Epithymum

Such are the results of a comparison between Yorkshire and other large districts lying to the north and the south: let us now turn to consider the characters of the several natural divisions of this great County, and the Botanical peculiarities which accompany them.

Yorkshire, it has been observed,* is one of the few Counties of England which are defined by natural boundaries. On the west it reaches, and in some places extends beyond, the great summit ridge of the island; the Tees is its natural limit on the north, the Dun for a great length on the south, and on the east it is washed by the German Ocean. Within the large area thus defined, are several great natural districts, possessing strong marks of distinction. These attracted the attention of the celebrated naturalist, Dr. Lister, who resided at York, and who in his proposal for a new set of maps, communicated to the Royal Society in 1683, presents a sketch of the geological constitution of four great districts in Yorkshire.

- "1. The Wolds:—chalk, flint, and pyrites, &c.
 - 2. Blackmoor:—moors, sandstone, &c.
 - 3. Holderness: -- boggy, turf, clay, sand, &c.
 - 4. Western Mountains:—moors, sandstone, coal, ironstone, leadore, sand, clay, &c."

In this enumeration, Lister has omitted one of the most remarkable features of the County, the continuous vale which from the Tees to the Trent separates into two tracts the hilly districts of Yorkshire, and gives

^{*} See Professor Phillips's Illustrations of the Geology of Yorkshire, vol. 1.

passage to the Humber for a large proportion of the drainage; nor has he noticed that the great district of hilly ground on the west of the vale of York admits conveniently of subdivision into two large and nearly equal portions.

Thus we have in Yorkshire six principal physical regions, which correspond to as many great groups of the subjacent mineral aggregates. Several of these may require further subdivision; as for example, the great central Vale, from which the low terrace of magnesian Limestone which limits it on the west may be separated. We must also notice the line of Sea Coast, and thus we shall have eight Botanical divisions, viz.

- 1. The North Western or Mountain Limestone district.
- 2. The South Western or Coal district.
- 3. The Magnesian Limestone tract.
- 4. The great central Vale.
- 5. The North Eastern or Oolitic Hills.
- 6. The Chalk Wolds or South Eastern Hills.
- 7. The district of Holderness.
- 8. The Sea Coast.

The Map will shew the relative position and extent of these districts.

NORTH-WESTERN DISTRICT.

EXTERNAL CONFIGURATION.—This whole district is of a mountainous character; the greatest elevation is reached in the extreme north-western part, where the summit of Mickle Fell attains a height of 2,600 feet above the sea. If the summit of drainage be followed between the Tees, Swale, Yore and Wharfe, all rivers of Yorkshire flowing east or south-east, and the Eden and Lune of Cumberland and Westmoreland, we find in succession, on the Yorkshire side, the detached heights of-Watercrag, 2,192 feet; Rogan's Seat, 2,207 feet; Nine Standards, 2,153 feet; Hugh Seat, 2,330 feet; Ladies' Pillar, 2,261 feet; Swarthfell, 2,237 feet; Barfell, 2,226 feet; Shunnor Fell, 2,351 feet; Lovely Seat, 2,216 feet; Widdal Fell Top, 2,205 feet; Dod Fell, 2,189 feet. Connected with this lofty but interrupted chain, is a remarkable group of noble mountains about the source of the Ribble, including Wharnside, 2,414 feet; Ingleborough, 2,384 feet; and Pennigent, 2,281 feet; to which may be added Great Colm, 2,253 feet; Fountain's Fell, 2,190 feet; and Coska Moor, 2,050 feet.

Stationed on the commanding height of Wharnside, the observer may remark on the east a mountain of nearly the same name (Great Whernside) and nearly equal elevation, 2,310 feet; and close to it a rival named Buckden Pike, 2,304 feet. To the south he may see the huge mass of Pendle Hill, near Clithero, in Lancashire; which, though of far inferior height, (1,894 feet) is joined by the partial respect of the picturesque region around it, into a rude verse* with Ingleborough and Pennigent. On the west, the eye ranges from Wharnside to the frontier peaks of the Lake Country; and in the nearer ground, a part of Westmoreland, on the east side of the Lune, from Kirby Lonsdale toward Kirby Stephen, runs a broken ridge of slaty rocks which rise, in the hill called Birkin, to 2,000 feet, and in Howgill Fells, which belong to Yorkshire, constitute a remarkable and little known region, whose culminating point, 'The Calf,' is 2,220 feet above the sea.

Let the reader imagine that from the series of lofty summits thus sketched from the source of the Tees to the sides of the Ribble and the Lune, a length of sixty miles, the whole wide region sinks with a general and gentle inclination, to the east, till it is lost in the vale of York; let him regard the valleys of the Tees, Swale, Yore, Nid, Wharfe, and Ribble, as excavations commencing amidst, and about 1,000 feet beneath. the lofty points which have been named, sinking rapidly through a desolate region to about 800 feet above the sea, and then dividing vales sometimes rich with luxuriant meadows, (as Wensleydale) or buried in ancient woods (as great part of Nidderdale) or overhung by mighty rocks (as the upper branches of Wharfedale); and further consider the wild and fantastic ridges which separate these dales, and give origin to innumerable rivulets and picturesque cataracts; he will scarcely need the additional charm imparted by the noble abbeys which adorn so many of these valleys, to persuade him to explore the mountain region of Yorkshire.

There are two considerable Lakes in and adjoining the district; Simmer Water, in Wensleydale, and Malham Tarn, the source of the Aire. Bowland Forest may be considered as an extension of the moorland part of this region; and the Low Craven country about Gisburn must be ranked with the calcareous and argillaceous portion.

^{* &#}x27;Pennigent, and Pendle Hill, and Little Ingleborough,' &c.

The Internal Structure of this magnificent district, may, for the purpose of this essay, be thus briefly noticed.

1. The Slaty Tracts.—Hougill Fells, the largest of all, consists of argillaceous rocks, the lowest in the series of Yorkshire strata.

A small tract of nearly contemporaneous rocks, ranging eastward from Kirby Lonsdale to beyond Horton-in-Ribblesdale, yields valuable slate and *lies under limestone*.

- 2. The Basaltic Tract.—This is an important feature in Teesdale; from the sources of the river Tees to its junction with the Yorkshire Lune, there is little variety in the rock. Its effect on the adjacent limestone is remarkable, for it has converted the dark calcareous rocks to a bluish white and granular marble, or loose 'sugar limestone.'
- 3. The Cave Limestone Tract.—By this title attention is directed specially to the wide surfaces and cliffs of limestone, almost entirely unmixed with other substances, which lie at the base of Wharnside, Ingleborough, and Pennigent, and occupy a broad area about the source of the Aire.
- 4. The Tract of Alternating Limestone, Sandstone, and Shale, (with some Bad Coal), (Yoredale Rocks of Phillips) occupies a great breadth of surface, filling great part of Teesdale, Swaledale, Yoredale, and Wharfedale, and rising to a considerable height in the intervening ridges, but seldom reaching their summits. A remarkable feature of geography in this tract, is a row of swallow holes in the line where each limestone bed comes to the surface.
- 5. The Millstone Grit Tract.—This includes a series of coarse gritstones, finer flagstones, shales, ironstone and bad coal. The loftiest points (except Mickle Fell.) are formed of parts of this series; it covers enormous surfaces between the dales, and occupies nearly all the eastern part of the north-western region.

ASPECT OF VEGETATION.—Throughout the north-western district, distinctions appear between the vegetable coverings of the slaty, basaltic, calcareous, shaly, and gritstone tracts, and sometimes they are obvious and even striking. Wherever the gritstone rocks rise to high ground they are thickly covered by heath, and often wrapped in deep and ancient peat; beneath a craggy summit of such grit, runs a bluish green herbage of sedges, rushes, and grass, on a slope of argillaceous shale; and very often beneath or amidst these contrasted tints are bands of beautiful

short green herbage, the gift of the limestone rocks. Even to the very summit of Mickle Fell, Cam Fell, and other high points, the limestone retains this superiority of character, and may thus be traced to the brows of Wharnside and Pennigent, across the thick heath which envelopes the gritstone.

The hue and quality of the herbage on the peaty tracts vary; some of the Hougill Fells have the bluish green sedgy herbage; others are heathy.

The district is only partially wooded; it is chiefly in the lower parts of the valleys, where millstone grit is divided by the rivers, at elevations less than 600 feet above the sea, that any thing like forests appear; at elevations exceeding 1,000 feet, the mountains and valleys are generally bare of trees.

DISTRIBUTION OF PARTICULAR PLANTS.

The following plants, which occur in the north-western district, have been found in no other part of Yorkshire.

Thalictrum alpinum Draba incana -muralis Hutchinsia petræa Thlaspi alpestre Barbarea precox Cistus Marifolius Silene maritima Arenaria verna Sedum villosum Rhodiola rosea Saxifraga hirculus - oppositifolia - hypnoides - azoides Hippocrepis comosa Senecio saracenicus Hieracium maculatum Lawsoni Hypochæris maculata Polemonium cæruleum Mentha agrestis Daphne Mezerium Asarum Europæum Juniperus communis Convallaria polygonatum Epipactis rubra Tofieldia palustris

Juncus polycephalus Dianthus caryophyllus Potentilla fruticosa - alpestris Dryas octopetala Rosa dumetorum Ribes petræum Epilobium alsinifolium Galium pusillum - boreale Vaccinium uliginosum Symphytum tuberosum Arbutus Uva Ursi Gentiana verna Bartsia alpina Teucrium scordium Mentha rotundifolia – acutifolia gentilis Polygonum viviparum Kobresia caricina Carex strigosa - capillaris distans Sesleria cærulea Poa nemoralis Festuca Myurus

Of these, one (Dryas octopetala) is peculiar to Yorkshire. All the others have been found to the northward; but seven, viz., Potentilla fruticosa, Sedum villosum, Ribes petræum, Saxifraga hirculus, Gentiana verna, Bartsia alpina, Tofieldia palustris, are not known to the south of Yorkshire.

The localities in this district which most particularly merit the attention of Botanists are the following:—

UPPER TEESDALE generally, but especially at the points marked No. 1 and 2 on the annexed Map.

No. 1 is on Cronkley Fell, where the limestone is altered by the action of the 'Whin Sill,' so as to resemble coarse lump sugar. On this 'sugar' limestone grow—

Cistus marifolius Hippocrepis comosa

Draba incana Arenaria verna

And near the same locality-

Gentiana verna Bartsia alpina Epilobium angustifolium Dryas octopetala Thalictrum alpinum Lycopodium alpinum Aspidium lonchitis &c. &c.

No. 2 is a remarkable spot near the head of Balderdale, where the Black Beck joins the main stream. The *old channel* of the Black Beck, marked by a dotted line on the map, is the locality of Saxifraga hirculus.

VICINITY OF INGLEBOROUGH AND SETTLE.—Saxifrages abound in this limestone district, and a second locality of Dryas octopetala is in Arncliffe Dale. The Ladies' Slipper is also among the rarities of this magnificent mountain district.

Bolton Abbey.—In the shales and gritstones of this part of the valley of the Wharfe, occur Limosella aquatica, and Teucrium scordium.

THE SOUTH-WESTERN DISTRICT.

EXTERNAL CONFIGURATION.—This is an elevated country, but it rarely deserves to be called mountainous, even on the extreme western boundary, which from the vicinity of Skipton to beyond Sheffield preserves a bold irregular ridge of ground, rising in Boulsworth Hill to 1,697 feet; in Blackstone Edge to 1,500 feet; in Holme moss, near

Penistone, to 1,859 feet; and at Bradfield Point, N. W. of Sheffield, to 1,246 feet. From this high ridge the whole coal district slopes to the eastward, and finally loses itself beneath the low terrace of magnesian limestone, which margins the southern part of the great central vale of Yorkshire. From this Tract, the Aire, Calder, and Dun receive their principal branches, and almost all these numerous streams run in valleys originally of great beauty and interest, and not wholly deprived of their charms by the wonderful extension of manufacturing industry and machinery from Leeds, Wakefield, Bradford, Halifax, Huddersfield, and Sheffield.

INTERNAL STRUCTURE.—The component strata of the coal tract are sandstone, (some of the lowest beds on the northern and western border correspond to the millstone grit noticed in the preceding pages,) argillaceous shales, often full of fossil plants, ironstone, and beds of coal. There is no limestone more than a few inches thick in the whole district; the soil is generally argillaceous, in places a mere sand.

ASPECT OF VEGETATION.—This is still the woody district of Yorkshire, though in all the valleys the ironworks of former days and the thousand uses for timber generated by the industry of the present age, have swept away whole forests of oak. Within the memory of man, great destruction of this nature occurred at and near Sheffield, and yet at this moment within a small circle of that theatre of fire, are many of the grandest woods in the north of England. These chiefly occupy and often fill the valleys, but the highest summits are generally covered with heath and peat.

DISTRIBUTION OF PARTICULAR PLANTS.

The following plants, found in this district, have not been noticed in other parts of Yorkshire.

Cotyledon umbilicus, Circæa alpina.

Of these, Cotyledon umbilicus is supposed to attain its northern limit in Yorkshire.

Hebden Valley, a branch from the great vale of the Calder near Halifax, is one of the most productive parts of this district for the Botanist.

MAGNESIAN LIMESTONE.

EXTERNAL CONFIGURATION.—One of the most remarkable features in Yorkshire, is formed by the long low terrace which runs in a straight line from the Tees at Pierse Bridge to the southern border of the County at Anston. The highest point in this range is Ledston Beacon, only 450 feet above the sea; the terrace breaks off abruptly to the west, and slopes very gradually below the central vale to the east. The rivers Tees, Yore, Nid, Wharfe, Aire, and Dun, all break through the range in pleasing and romantic glens, often enriched by wood, and unusual sinuosities of the stream.

INTERNAL STRUCTURE.—Generally beds of yellow magnesian limestone form the higher surface, margined by soft subjacent sandstones on the west, and by red gypseous clays and a purer limestone rock on the east.

ASPECT OF VEGETATION.—The hills are generally bare, and the soil is usually found to be infertile; it yields coarse grasses and rough pastures; but the Botanist may be consoled by many rare plants which belong to the range.

DISTRIBUTION OF PARTICULAR PLANTS.

The following species of plants have been found in no other district of Yorkshire.

Anemone pulsatilla Asperula cynanchica Campanula rapunculoides Campanula patula Conyza squarrosa Ophrys aranifera

Of these, Anemone pulsatilla, Campanula rapunculoides, and Campanula patula, are supposed to attain their northern limit in Yorkshire.

THORP ARCH.—A very interesting and picturesque locality in this district; will repay alike the Botanist, Entomologist, and Conchologist for a day's close research in the woods and rocks which overhang the Wharfe.

THE GREAT CENTRAL VALE.

EXTERNAL CONFIGURATION AND INTERNAL STRUCTURE.—Were the general level of the land in the north of England to be lowered only 100 feet, (a case quite familiar in reasoning concerning ancient geological phenomena,) the great vale of York would be submerged; the Tees, Swale, Yore, Wisk, Nidd, Wharfe, Derwent, Aire, Calder, Dun, Trent, and Hull, would separately reach the sea, and powerful currents flowing up and down what is now the vale of York would occasion in it changes of the most important kind. By some such combination in earlier eras of the world, the phenomena visible in this great hollow, which extends from the Tees to the Trent, and by that river is united to the parallel broad plains of Nottinghamshire, and the central parts of England, were probably occasioned.

The strata visible at particular points in the vale of York are red sandstone, (Boroughbridge,) red clays and gypsum, (Howsham,) blue lias clays, (Topcliffe); and under all these runs the magnesian limestone in a continuous low terrace, dividing the vale of York from the Western regions already described. The greater part of the vast area under which the red formation spreads, is covered superficially and to a considerable depth by gravel, clay with pebbles, and small accumulations of lacustrine marls. Anciently many small lakes have existed in the vale of York, but drainage and vegetable growth have obliterated nearly all.

ASPECT OF VEGETATION.—Receiving from numerous streams the detritus of the uplands lying east and west, the vale of York is full of plants which seem derived from these districts, as well as others more commonly found in lower ground. Its flora is consequently very rich, and plants supposed to characterize different soils grow here near together.

DISTRIBUTION OF PARTICULAR PLANTS.

The following species of plants have been found in no other district of Yorkshire.

Viola lactea Peplis portula Cnicus pratensis Symphytum officinale Lysimachia thyrsiflora Hottonia palustris Samolus Valerandi Scheuchzeria palustris Tulipa sylvestris LECKBY CARR is a point deserving special attention by the lovers of bog plants, insects, and shells.

THE NORTH-EASTERN OR OOLITIC HILLS.

EXTERNAL CONFIGURATION.—Fronting the loftier mountains of the west, the edge of this district looks with greater boldness over the vale of York, from the abrupt heights of Hambleton, than any one acquainted only with the southern oolites could imagine. The highest point of the district is at Bottom head, 1.485 feet above the sea, and the general slope is to the south-east. In this direction as well as toward the north, it reaches the sea, and thus on three sides its boundary is a cliff, while on the south side it declines gently into the vale of Pickering. The waters run for the most part to the south, through various dales, and collect in the river Derwent: but one considerable stream, the Esk, runs eastward to Whitby. The hills derive importance from their abruptness, and the valleys are interesting from the narrow, woody and seeluded character of their lower parts.

INTERNAL STRUCTURE.—The strata comprise the lias clays and interposed calcareous and arenaceous beds, the oolitic limestones, and about 700 feet of sandstones, shales, and thin bad coal. One great basaltic dyke crosses the district from the Tees to near Robin Hood's Bay.

Aspect of Vegetation.—The greater portion of the higher ground is covered by heath and peat, (often enclosing large trees,) the interior valleys become woody in their lower parts, but the sea air checks the growth of trees on the coast, in all but well defended spots like the sheltered banks of the Esk. An aspect of peculiar desolation belongs to the dark and wearisome moorlands which fill the immense area between Scarborough, Whitby, Stokesley, and Helmsley. It is gratifying to believe that some part of this poor country is under a course of gradual improvements by the beneficial operation of the Pickering and Whitby Railway, which from either end brings lime, the grand improver of moorland, at moderate cost. The effect of this substance, on the heathy surface, is in one respect magical; it brings up a spontaneous and abundant growth of white clover, where none was ever seen before.

xiii.

DISTRIBUTION OF PARTICULAR PLANTS.

The following plants, which occur in this district, have been found in no other part of Yorkshire.

Cornus suecica Centaurea jacea Pyrola rotundifolia Sedum dasyphyllum Arabis hispida

Of these, Arabis hispida is supposed to be peculiar to Yorkshire; Cornus suecica, which flowers in Yorkshire, is also found in Northumberland, but does not flower there.

THE FOLLOWING LOCALITIES SHOULD BE VISITED.

HOLE OF HORCUM.—This is a singular basin shaped hollow, on the road from Pickering to Whitby. It is the head of a small valley, suddenly and deeply excavated, in the moorlands, through the calcareous grit and lower strata. Here grows Cornus suecica.

Whitstoncliffe.—This is a remarkable cliff three miles north of Thirsk, composed of oolites, gritstone and clays, whose summit is 1,178 feet above the sea; on the abrupt hill side which looks to the west are scattered rocks; and below them a lake (Gormire) with a rude border of broken ground, forming a sort of undercliff.

Scarborough Castle Hill.—On this insulated hill of oolite and other subjacent rocks, is a continual efflux of water, nourishing aquatic plants. Mr. Bean has found a considerable number of land shells upon the narrow surface, here exposed to the sea air, though raised above the water about 250 feet.

Helmsley.—In a valley running north from this romantically situated town, grow the Cypripedium, Epipactis nidus avis, &c.

THE WOLDS.

EXTERNAL CONFIGURATION.—The features which are common to all the chalk ranges of England, shew themselves boldly in Yorkshire. Rising, in the Wilton Beacon, to the height of 805 feet, the Wolds overlook the wide vale of York on the west and the small vale of

Pickering on the north; eastward they run out to the bold promontory of Flamborough Head, and south-eastward sink below the levels of Holderness. Their surface is agreeably undulated by a complication of bold rounded hills, ramified between the smoothly excavated valleys, down which no water ever ran, though their gently inclined surface and sinuous course mark clearly the powerful and gradual action of water. In some localities (as Thixendale) many of these valleys come together, and produce the extreme of gentle and pleasing undulation. Copious springs of pure water issue from the foot of the Wolds.

INTERNAL STRUCTURE.—At a few inches or feet in depth from the surface, chalk (with few flints) is almost uniformly found; in some of the valleys, however, (as about Givendale) lias clays appear; in others (Middleton) gravel abounds. The soil, which on this calcareous rock might be expected to be pure calcareous earth, contains commonly an admixture of sand, and sometimes of gravel.

ASPECT OF VEGETATION.—Chalk hills are generally devoid of trees, except where much gravel, sand, or clay, covers locally the calcareous rock: this happens in Oxfordshire, but not in Yorkshire, except on the eastern and lower part of the Wolds. The high western border is as bare in Yorkshire as in Wiltshire; and could we restore (as perhaps even agriculturists might vainly desire) the rich short carpet of unfading green, which preceded artificial crops on these hills, the resemblance between the Yorkshire Wolds and Wiltshire Downs would be as perfect as when Lister remarked their similarity. Water meadows are not so frequent in Yorkshire as in Wilts and Dorset; though in some instances the springs which gush out from the Wolds might suffice for irrigation to a considerable extent.

DISTRIBUTION OF PARTICULAR PLANTS.

The peculiarity of chalky soils is so marked, that it appears surprising to find only one plant exclusively in the Wold district of Yorkshire; this plant is Crepis biennis. Perhaps the frequency of sandy and gravelly soils on the surface of the chalk rock, the dryness of the valleys, and the general scantiness of the herbage, may be among the reasons for this want of botanical peculiarity.

HOLDERNESS.

EXTERNAL CONFIGURATION.—This is not quite so level a country as Yorkshiremen commonly imagine. It is full of small ridges and mounds, enclosed amidst tortuous marshes and fens, on the line of actual or ancient streams easily choked through the feebleness of their descent to the sea. The highest point, Dinlington height, is 159 feet above the sea.

INTERNAL STRUCTURE.—Excepting at Bridlington, where tertiary sands appear, gravelly clays and sands, supporting buried forests and lacustrine deposits, fill the vale of Holderness to a considerable depth, and rest upon the chalk of the Wolds.

ASPECT OF VEGETATION.—There is little of natural wood in Holderness; yet its peat deposits are full of trees, some of which certainly grew on the spot. The Yew, Oak, Alder, Ash, Beech, Scotch Fir and Hazel, are the principal trees which occur in the peat. The sea line of Holderness extends for thirty miles, and is favorable in places for littoral vegetation.

DISTRIBUTION OF PARTICULAR PLANTS.

We only know of one plant (Euphorbia Cyparissias) in this district which has not been found in other parts of Yorkshire, and there is some doubt whether this be really wild.

SEA COAST.

From the Tees' mouth to Saltburn, the coast is guarded by loose sand hills; thence to Scarborough, Filey and Bridlington, by an almost complete barrier of lofty and rugged precipices; from Bridlington to Kilnsea, low and wasting cliffs prevail, and Spurn Point is a loose mass of drifted sand and gravel.

The littoral plants found no where else in Yorkshire, are the following:—

Centaurea calcitrapa Carduus tenuifolius Statice limonium Hippophäe rhamnoides Salsola kali Salicornia herbacea Chenopodium maritimum Beta maritima Atriplex laciniata STATICE ARMERIA, PLANTAGO MARITIMA, and SILENE MARITIMA, which are found on the Sea Coast, occur also at particular localities in Teesdale and Wensleydale, far inland.

It will be observed that of the eight districts into which we have divided the large area of Yorkshire, by far the richest in interesting and peculiar plants is the North Western Tract, in which the most characteristic rocks are Limestone and Basalt. How much of the peculiar character of the Flora of this part of the county is due to its mineral constitution is difficult to say, except in particular cases, because this is also the most elevated region of Yorkshire, and for that reason and its northerly position, ought apparently to nourish many plants not found elsewhere in the county.

Perhaps this is the district in which hereafter by careful attention to selected localities, the predominant features of calcareous, arenaceous, and argillaceous soils may be best determined, since these mineral distinctions are here plainly exhibited and generally free from the difficulty occasioned in other tracts of Yorkshire by the superficial covering of alluvial and diluvial detrites. At present we have not collected on this subject data either numerous or accurate enough to furnish satisfactory inferences.

CLASSES.

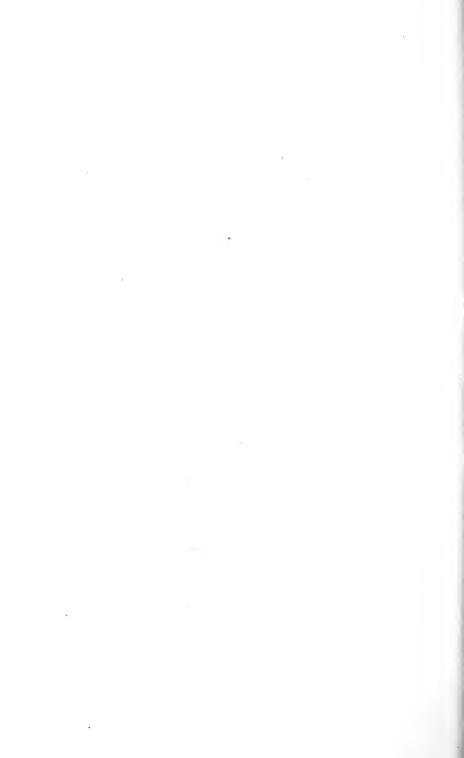
I. VASCULARES. II. CELLULARES.

CLASS I. VASCULARES.

SUB-CLASS I. DICOTYLEDONES.

DIVISIONS.

I. DICHLAMYDEÆ. II. MONOCHLAMYDEÆ. III. ACHLAMYDEÆ.



DIVISION I. DICHLAMYDEÆ.

ORDER I. RANUNCULACEÆ.

1. CLEMATIS.

1. C. VITALBA. Traveller's Joy. July. 12

In woods and hedges near Whitby. In the plantation at Duncombepark, and in Mr. Yorke's grounds at Bewerly, probably naturalized in the two last situations.

The branches are tough and used in the south for tying faggots with. It is particularly well adapted for covering arbours, being of very quick growth, and thrives in any soil or situation. This sections of the branches form beautiful objects for the microscope, and exhibit the vessels in great perfection.

2. THALICTRUM.

1. T. ALPINUM. Alpine Meadow-rue. June. 24

Redcar.

In peat on the top of Cronkley Fell, Teesdale.

This plant is subject to a minute parasite, *Æcidium Thalictri*, which grows on the under surface of the leaves in clusters of a roundish form, and under the microscope is a very beautiful object.

- T. MINUS. Lesser Meadow-rue. June—July. 4
 In moist situations, at Thorp Arch and Bramham. Near Settle. Gordale. Skirreth wood, near Ingleton. Kilnsey. Common near
- 3. T. MAJUS. Large Meadow-rue. June—July. 24

 Thorp Arch. Near Whitecliff lime kilns. Ripon. Near Skipton.
 Gordale. Near Eggleston, on the Yorkshire side of the Tees.
- 4. T. FLAVUM. Common Meadow-rue. June—August. 24

 Moist meadows, rivers and banks of rivers. Common in the vale of York.

3. ANEMONE.

1. A. PULSATILLA. Pasque-flower. April-May. 24

In a plantation of larches about one mile north of the road leading from Tadcaster to Bramham. Darrington Leys, near Ferrybridge. Heath between Doncaster and Broadsworth. Said to grow likewise near Ledston Lodge, and in a place called the Close near Pontefract, also near Abberford.

A beautiful plant for the flower garden. The juice of the petals stains paper green, and is used in some countries to colour the Paschal eggs, whence, or rather according to old Gerrard, from the Season of flowering, about Pasque time or Easter, the English name is derived.

2. A. NEMOROSA. Wood Anemone. April. 4
Woods and shady lanes, common.

4. MYOSURUS.

1. M. MINIMUS. Mouse-tail. May. O

In dry gravelly soil. At Holdgate, near York. In fields at Staveley, near Knaresbro'.

The elongated receptacle, beset with hundreds of capsules, is worthy the notice of the curious.

5. RANUNCULUS.

1. R. Flammula. Lesser Spear-wort. June—September. 4

In watery places, common.

Var. β. R. REPTANS, Lightfoot Fl. Scot. Title, vol. 1. Tilmire, near York.

Some years ago a man travelled through many parts of England administering emetics, which, like white vitriol, operated the instant they were swallowed. The distilled water of this plant was his medicine: "and from the experience I have had of it," says Dr. Withering, "I feel myself authorised to assert, that in the case of poison being swallowed, or other circumstances occurring, in which it is desirable to produce instantaneous vomiting, it is preferable to any other medicine yet known, and does not excite those painful contractions in the upper part of the stomach which white vitriol sometimes does."

2. R. LINGUA. Great Spear-wort. July. 24

In marshes and ditches. Stockton forest, and Askham bogs, near York. Seamer moor, and in the Mere, Scarbro'. Newsham carr, near Thirsk. By the road side between Upsall and Kirby Knowle. Terrington carr. Near Ripon. Near Copgrove. Kilburn Thicket, near Coxwold. Near Kirkham. Wisk, near Northallerton. Seamer water, Wensleydale. Potteric carr, Doncaster.

This plant is rather shy of flowering in its native habitat, but removed to light rubbishy soil in the garden it flowers abundantly.

3. R. FICARIA. Pilewort. March. 4

In meadows, about hedge banks and by road sides, everywhere.

Curculio dorsalis is found upon this plant, likewise a small parasitic fungus Æcidium Ficariæ covering the leaves with bright orange. Our earliest visitant, the beautiful Brimstone Butterfly, Gonepteryx Rhamni, may frequently be seen hovering over its bright yellow blossoms.

"Trusting the first warm day of spring, When transient sunshine warms the sky, Light on his yellow spotted wing Comes forth the early butterfly.

With wavering flight he settles now Where PILEWORT spreads its blossoms fair, Or on the grass where daisies blow, Pausing, he rests his pinions there."

4. R. Auricomus. Goldilocks. April—June. 24

Dry fields and shady places. In the vale of York not uncommon. Knavesmire wood, and Holdgate. Hovingham woods. Ganthorp. Clink Bank wood, near Richmond. Doncaster. Near Halifax.

5. R. SCELERATUS. Water Crowfoot. June—August. ①

Ditches and watery places. Near Appleton. Stamford bridge. Foston. Beverley. Common near York.

6. R. Bulbous. Bulbous Crowfoot, Butter-cups. May. 24
In pastures and meadows everywhere.

Orthosia Pistacina (Veiny Chesnut) feeds upon this plant, perhaps the only Lepidopterous larva that is found on the Ranunculaceæ.

- 7. R. HIRSUTUS. Pale Hairy Crowfoot. June—October.

 Moist clayey places where water has remained during winter.
- 8. R. REPENS. Creeping Crowfoot, Toad teather. June—August. 4 In meadows and pastures, common.
- 9. R. Acris. Upright Meadow Crowfoot. June—July. 24
 In meadows and pastures, common.
- 10. R. ARVENSIS. Corn Crowfoot. June—July. ①

 In dry gravelly corn fields. In Heslington field, and several other places, near York. Malton. Huggate, &c. Skeeby, near Richmond. Knaresbro', &c. Fields at Hipperholme and Lightcliffe, near Halifax.
- R. HEDERACEUS. Ivy Crowfoot. May—August. 2/
 In shallow rivulets, ditches, and pools in the high lands of the county.
- R. AQUATILIS. White Floating Crowfoot. May—July. 4
 In ditches and ponds common, with its varieties.

6. TROLLIUS.

1. T. EUROPÆUS. Globe Flower. May-June. 4

In shady rather moist situations. On Rumbald's moor about a mile above Helwick in a flat boggy place on the left of the road to Otley. On the slope of the hill in an inclosure upon Thornton moor adjoining to the Halifax and Keighley turnpike road. Turner clough in Rishworth, near Ripponden. Bottom of Beckdale, near Helmsley. East sdoe of Round Howe, near Richmond. Very abundant in Teesdale. Meadows at Cleves, near Thirsk. Hovingham woods, near Holly Hill. Wiganthorp wood, near Castle Howard. About Grassington in Wharfdale. Near Copgrove very common. Ripon. Wensleydale. Near Malham cove. Very abundant in most of the moist woods about Settle, but always on the limestone. Esk Bank, near Whitby.

7. HELLEBORUS.

1. H. VIRIDIS. Green Hellebore. April-May. 4

Woods and dry pastures. In a pasture behind the Church, Tadcaster, abundant. On the side of the road between Tadcaster and Leeds by Kidd Hall. Woods, near Roche Abbey. At Londesbro'. In a thicket opposite Brampton, near Marsk Hall. Ayton Forges. In a meadow at Wharfe six miles north west of Settle. Fountain's Abbey. Stony pastures, near Tanfield. About Abberford. Banks of the river opposite the mill, Knaresbro'. On a ditch bank at Coneysthorp one mile from Castle Howard. Woods between Warmsworth and Conisbro'. Near Doncaster. Beckdale, near Helmsley.

2. H. FETIDUS. Bear's-foot, Stinking Hellebore. March—April. 4

In thickets and waste ground. Londesbro'. In rocky pastures above the village of Feizer, four miles north west of Settle. Lanes at Campsall, near Doncaster. Woods between Warmsworth and Conisbro', on limestone, with a habit very different from the cultivated plant. Langwith, near York.

8. CALTHA.

1. C. Palustrus. Marsh-marigold. March—May. 4

In marshy meadows, common.

Var. β. De Cand. Caltha minor Miller's Dict. ed. 8.

Near Cauldron Snout, Teesdale. Near Todmorden.

The larva of Lampronia Calthella (the Small Gold) feeds upon the leaves. The rare Chrysomela Hannoveriana may be found in the flowers in May, near York and Skipton.

9. AQUILEGIA.

1. A. VULGARIS. Columbine. June-July. 24

By the side of thickets and hedges. Langwith lane, near York. Headley, near Tadcaster. Road side near Whitwell. Jack Daw cragg, near Tadcaster. Fountain's Abbey. Thorp Arch. Addle bridge. Helmsley. In Craven. Near Applegarth abundant. Aysgarth Force, Wensleydale. Hildenleywood, near Malton. Cawkleeswood two miles from Hovingham. Calais wood one mile from Castle Howard. West wood, near Beverley. Common in some of the mountainous woods, near Settle. Oxclose wood, near Kirkham.

The larva of Polia Chi (the July Chi) feeds on the plant.

10. DELPHINIUM.

1. D. CONSOLIDA. Field Larkspur. June—July. ①

In sandy corn fields probably imported with the seed corn, rare.

 ${\it Chariclea~Delphinii}~({\it Pease~blossom})~{\it feeds~upon~this~species}~;~this~rare~and~beautiful~insect,~I~believe,~has~been~captured~in~Yorkshire.$

11. ACONITUM.

1. A. NAPELLUS. Wolf's-bane, or Monk's-hood. July—August. 4

North side of the Wharfe a little above Thorp Arch. On the Hagg in the road to Colburn. On a ditch bank at Elvington, naturalized. On an island in the Ribble below Settle. Probably the whole of these habitats are escapes from gardens.

A very dangerous plant far too common in gardens. Abrostola illustris (Purple shades) feeds on the plant.

12. ACTÆA.

1. A. spicata. Bane-berries. May-June. 4

Woods at Thorp Arch. Huddlestone quarry, near Sherburn. Woods at Helmsley. Forge valley, near Scarbro'. Liley wood, near Whitley Hall, three miles from Mirfield. Rocks above Gordale. Wood near the cove, Malham. Arthur's Gill and Whitfield Gill, near Askrigg. Hildenley wood, two miles from Malton. Cawklees wood, near Hovingham. Foot of Ingleborough. Near Nunnington.

ORDER II. BERBERIDEÆ.

1. BERBERIS.

1. B. VULGARIS. Barberry. May—June. 12

In hedges and thickets. Hob moor and Acomb, near York. Fairbourn, near Ferrybridge. On the ruins of St. Agatha's Abbey, near Richmond. In the hedges, near Leckby carr. Near Pontefract. In Kelcow wood, near Settle. Conisbro', and other places, near Doncaster.

The larva of Anticlea Berberata (the Cloaked Carpet,) feeds on this shrub.

2. EPIMEDIUM.

1. E. ALPINUM. Barrenwort. May. 24

This plant has (if any) a very doubtful claim to that of a Yorkshire species; it was observed by the late Dr. Richardson in Bingley woods, where it is said to have been planted for the purpose of imposing on that gentleman, and where it is not now to be found. We have noticed it at Londesbro', certainly not wild.

ORDER III. NYMPHÆACEÆ.

1. NYMPHÆA.

1. N. ALBA. White Water-lily. June-July. 24

In slow rivers. In the Foss at York. In the Derwent. In a pond at Middleton Lodge. In ponds at Hildenley, and several other places, near Malton.

The larva of Hydrocampa Potamogeta (the Brown China Mark) feeds on both the species.

Sir J. E. Smith says, "The sinking of the flowers under water at night having been doubted, I have been careful to verify it in this species. The stimulus of light, which indeed acts evidently on many other blossoms and leaves, expands and raises, with peculiar force, these splendid white flowers, that the pollen may reach the stigma uninjured; and when that stimulus ceases to act, they close again, drooping by their own weight, to a certain depth. The still more ponderous fruit finally sinks to the bottom." The following lines are so descriptive of this 'stately river Queen,' that I may perhaps be excused for introducing them here.

Oh! beautiful thou art,
Thou sculpture-like and stately river Queen.
Crowning the depths, as with the light serene
Of a pure heart.

Bright lily of the wave! Rising in peerless grace with every swell. Thou seem'st as if a spirit meekly brave Dwelt in thy cell!

Lifting alike thy head
Of placid beauty, feminine yet free,
Whether with foam or pictured azure spread
The waters be.

What is like thee, fair flower, The gentle and the firm? thus bearing up To the blue sky that alabaster cup, As to the shower?

2. NUPHAR.

1. N. LUTEA. Yellow Water-lily. July. 24
In rivers and pools, frequent.

ORDER IV. PAPAVERACEÆ.

1. PAPAVER.

- P. Hybridum. Round rough-headed Poppy. July.

 In sandy fields. Corn fields, near Malton and near Thirsk. On the Wolds.
- 2. P. Argemone. Long rough-headed Poppy. June—July. ⊙

 In fields between Howden and Booth-ferry. Near Beverley.

 Heslington field, and other places, near York, common. Castle Howard, &c.
- 3. P. RHÆAS. Common Red Poppy. June—August. ⊙
 In corn fields a troublesome weed.
- 4. P. Dubium. Long smooth-headed Poppy. June—July. ⊙

 In cultivated fields in light soil. Cliff fields, near Bradford. In several places near Settle. Heslington fields, &c. near York. Common about Castle Howard.
- P. CAMBRICUM. Yellow Poppy. June. 24
 Mossdale-head, Wensleydale. Wood End, near Thirsk. Near Londesbro'. Wheatley, near Halifax. On the river bank at Settle. About Weathercoat cave, near Ingleton.

2. CHELIDONIUM.

ORDER V. FUMARIACEÆ.

1. FUMARIA.

1. F. LUTEA. Yellow Fumitory. May. \mathcal{L} Old walls. Fountain's Hall, near the Abbey. On the walls at Londesbro'.

2. F. CLAVICULATA. White Climbing Fumitory. July—August. Amongst bushes in shady situations on sandy poor soil. Langwith, near York. Hookstone craggs, near Knaresbro'. Bingley. Addle moor. Kirkstall forge. Bulmer hagg, near Castle Howard.

Arncliffe wood. Near Halifax, frequent.

3. F. OFFICINALIS. Common Fumitory. May—August. In cultivated ground, common.

4. F. Parviflora. Small-flowered Fumitory. August—September. •

Ramping Fumitory. June—September. 5. F. CAPREOLATA.

> In a hedge at Clifton, near York. Near Sheffield. In hedges near Beeston. In the lane leading to Skeeby from Richmond. Near Whitby.

ORDER VI. CRUCIFERÆ.

DIVISION I. SILICULOSÆ.

DRABA.

- 1. D. VERNA. Common Whitlow-grass. March—April. On walls, banks and waste sandy ground, frequent.
- 2. D. INCANA. Twisted podded Whitlow-grass. April—June. On Cronkley scarrs, Falcon clints, and On limestone rocks. Roseberry coppie. Reeth moor, eight miles north west of Leyburn. On a rock north of Seamer water, Wensleydale. Malham cove and Gordale scarrs. Rock, near the Ebbing and Flowing Well, near Settle.
- Speedwell-leaved Whitlow-grass. April—May. 3. D. MURALIS. On the shady side of limestone rocks and walls. Malham cove, and in the footpath between Kettlewell and Arncliffe. Amber dean, near Arncliffe. Littondale. Ingleton and Settle.

2. CAMELINA.

Gold of Pleasure. June-July. O 1. C. SATIVA.

Corn fields and by way sides. On the footroad from Thirsk to Thirlby. Corn fields at Clapgate, near Richmond. Near Rother-ham. Near Pontefract. Near Beverley. On the Wolds. Never of long continuance in one station.

3. LEPIDIUM.

1. L. LATIFOLIUM. Broad-leaved Pepperwort. June—August. On a rock on the left of the road going out of Kirkgate, Knaresbro', to the river Nidd. Rocks at Brompton, near Knaresbro'. On the rocks between Redcar and Whitby. Sandsend, near Whitby.

2. L. RUDERALE. Narrow leaved Pepperwort. June. ⊙

On the banks of the muddy salt water ditches at Coatham, near Redcar. On the pier, Scarbro'. On the cliffs from Filey to Bridlington.

3. L. CAMPESTRE. Common Pepperwort. July—August. O

In cultivated fields in poor sandy soil. Heslington fields, Stockton, Dunnington, Sand Hutton and other places, near York. Terrington Broats, near Castle Howard. Malton. Frequent in the fields above Upper Foot in Midgley, and other places, near Halifax.

4. HUTCHINSIA.

1. Н. РЕТВЖА. Rock Hutchinsia. March—April. ⊙

On limestone rocks. At Malham tarn. Near the waterfall at Burton in Bishopdale. On rocks on the moors about Reeth, in Swaledale. On a rock to the north of Seamer water, Wensleydale.

5. TEESDALIA.

1. T. NUDICAULIS. Naked-stalked Teesdalia. May—June. ⊙ and ♂

In dry barren fields. Langwith moor, near the road from York to Elvington, five miles east of York. In corn fields at Alne, near Easingwold. Bulmer fields, near Castle Howard. Near Mirfield, on the road from Halifax to Wakefield. South extremity of Hutton moor, in the lane. Woodhouse moor, near Pocklington. Near Holme on Spalding moor. In an old quarry at Crooksmoor, near Sheffield.

Named in honour of Mr. Robert Teesdale, many years gardener to the Earl of Carlisle at Castle Howard. He died in 1804.

5. THLASPI.

1. T. ARVENSE. Penny Cress. June—August. O

In corn fields where the soil is poor and sandy. Between Londesbro' and Shipton, in the east riding. On the old wall between Settle and the bridge. One mile south east of Terrington. Mawthorpe dale, near Castle Howard. In the bleach yard at Leyburn, near Richmond.

2, T. Alpestre. Alpine Shepherd's Purse. June-July. 4

On limestone rocks. Within half a mile of Malham tarn. Very abundant at the calamine pits above Settle. Hirst Head, near Reeth. Near Winch bridge, in Teesdale. On the south side of Ingleborough.

3. T. Bursa pastoris. Shepherd's Purse. May-November. O

In waste places frequent. A beautiful bright pink variety grows at the entrance of Bishopdale from Wensleydale.

May frequently be seen infested with oval white blotches of the small parasitic fungus *Uredo Thlaspi*.

An esculent plant: in Philadelphia it is brought to market in large quantities in the early season. By being grown on rich soil it becomes very succulent, and is well worthy of cultivation.

7. COCHLEARIA.

1. C. OFFICINALIS. Scurvy-grass. April—May.

On dry banks as well as in wet pastures. Hob moor, near York. Near Hovingham. Scarbro' Castle. Near Nappa, in Wensley-dale. Banks of the Wharfe and Swale. By the side of a wood near Bolton Abbey. Helks wood, near the slate pits.

β. In Teesdale frequent. This, if only a variety, appears to be a very permanent one, as I have for several years cultivated it from seed, and in various soils and situations, without any difference in the appearance of the plants, except that of size. They form round dense tufts, from the size of a sixpence to three inches in diameter.

8. SENEBIERA.

1. S. Coronopus. Swine's-cress. June—September. ⊙

On waste ground and by way sides. Holdgate and other places, near York. In the streets of Beverley. On the old pier, Scarbro'.

9. CAKILE.

1. C. MARITIMA. Sea Rocket. June—September. O

On the sandy sea coast at the mouth of the Tees, near Coatham. On the north sands, Scarbro'. Near Whitby.

10. CRAMBE.

1. C. Maritima. Sea Kale. May—June. 4

On the sands near Coatham, sparingly. On the coast from Bridlington to Hornsey. Near Whitby.

DIVISION II. SILIQUOSÆ.

11. CARDAMINE.

1. C. IMPATIENS. Impatient Ladies'-smock. May—June. ⊙

In Crow Nest wood, near Settle. Kelcow, below the great cave.
On the scarrs above the village of Wharfe, five miles north west of Settle. On the church yard wall at Londesbro'. Abundant under Giggleswick scarrs.

2. C. HIRSUTA. Hairy Ladies'-smock. March—July. ①
Waste ground in moist shady places, frequent.

3. C. Pratensis. Meadow Ladies'-smock, Cuckoo-flower. Apr.—May. 24
In moist meadows and pastures, frequent. Found occasionally with double flowers near Richmond. Settle. York.

4. C. AMARA. Bitter Ladies'-smock. April—June. 4

In watery places by the sides of brooks and rivers. By the ditch in Clifton ings, near York. Frequent on the banks of the rivers Rye and Derwent. Newton Kyme, near Tadcaster. Near Gormire, under Whitsuncliffe, and in a brook behind Sowerby, near Thirsk. Beeley wood, near Sheffield. About Coxwold. Near Scarbro'. Clink bank, near Richmond. Runley Bridge mill, near Settle. Near Hawes, Wensleydale. Mr. Tatham's wood, near Ingleton. Eskdale side, and by Newbiggin and Groves hall, near Whitby. Near Halifax.

12. NASTURTIUM.

- 1. N. OFFICINALE. Water-cress. May—July. 4

 In shallow running waters, frequent.
- 2. N. SYLVESTRE. Creeping Yellow Cress. June—September. 4

 By the sides of rivers and ditches. Bank of the Ouse. Jordan dam, four miles below Sheffield. Topcliffe mill, near Thirsk. Between Beverley and Hull not unfrequent. Banks of the Ure, near Ripon. Ditches near Malton. Banks of the Aire.
- 3. N. TERRESTRE. Annual Yellow Cress. June—September. ①

 By the sides of rivers and ditches. Banks of the Foss, at York.

 Banks of the Derwent, at Yeddingham bridge. Bolton beck. Terrington and Ganthorpe, near Castle Howard.
- N. Amphibium. Great Water Radish. June—August.
 \(\mu \)
 Sides of rivers and ditches. Banks of the Ouse, Foss, and Derwent, near York. And other low parts of the county.

13. SISYMBRIUM.

- 2. S. SOPHIA. Fine-leaved Hedge Mustard. July—September. ⊙

 Waste ground and dry banks. Said to be a common plant; notwithstanding which, I have never observed it in this county except
 once, in 1836, on the banks of the Market Weighton canal. Near
 Settle.

BARBAREA.

- 1. B. VULGARIS. Yellow Rocket. May—August. ${\cal U}$ In marshy ground and on the banks of rivers, frequent.
- 2. B. PRECOX. Early Winter Cress. April—October. J. In the lane between Settle and Langeliffe.

15. ERYSIMUM.

1. E. CHEIRANTHOIDES. Worm-seed Treacle Mustard. May—July.
In a field at Ganthorpe, near Castle Howard. In the lane near the Hagg, on the road to Reeth from Richmond.

2. E. ALLIARIA. Jack by the Hedge. April—May. O

In shady lanes and hedges, frequent.

The larva of Curculio Alliaria feeds upon the plant.

16. CHEIRANTHUS.

1. C. FRUTICULOSUS. The Wall Flower. March—June.

On the walls of abbeys and old buildings, frequent.

The Wall Flower has been considered the emblem of fidelity in misfortune, because it attaches itself to the desolate, and enlivens the ruins which time and neglect would otherwise render repulsive. It conceals the savage records of feudal times by decorating the castle walls; occupies the painful void of the mouldering abbey; and weaves a garland on the dilapidated monument, deserted even by grateful memory.

"For this, obedient zephyrs bear Her light seeds round you turret's mould; And, undispers'd by tempests there, They rise in vegetable gold."

17. HESPERIS.

1. H. MATRONALIS. Dame's Violet. May-June. 4

In Hellerby wood, near Doncaster. In the road between Stack-house and Stainforth, one mile north of Settle. In the road between Rilston and Calton, seven miles east of Settle. Near Aysgarth bridge, Wensleydale.

18. ARABIS.

- 1. A. THALIANA. Wall Cress. April. ①
 On dry sandy or gravelly ground, frequent.
- 2. A. HIRSUTA. Hairy Wall Cress. June. 3

On dry banks, walls or rocks. Upsall Castle, &c. Sowerby fields, near Thirsk. Kirkstall Abbey. Walls at Coxwold. On the Hambleton hills. By the Swale, near Whitecliffe. Ruins of St. Agatha's Abbey, near Richmond. On the walls of Fountain's Abbey. On Ripon Minster. Near Settle. Wensleydale, abundant. Baxtenholme and Mawthorpe dale, near Castle Howard. About Rievaulx Abbey. Thorp Arch.

3. A. HISPIDA. Alpine Rock Cress. May—August. & On a wet rock at Whitsuncliffe, under the Hambleton hills, four miles north of Thirsk.

19. TURRITIS.

1. T. GLABRA. Smooth Tower Mustard. May—June.

O

By road sides in dry soil. Sowerby fields, &c. between Thirsk and Kilvington. At Darfield, near Sheffield. On the right hand side of the road from Green Hammerton to Boroughbridge. In the lane between Brompton and Catteric Bridge.

20. BRASSICA.

1. B. NAPUS. Rape or Cole-seed. May.

In corn fields, waste ground, and ditch banks.

Cultivated for the oil which the seeds produce. It is extracted by pressure; the refuse is used for fattening cattle, and is an excellent manure.

- 2. B. RAPA. The Turnip. April. & Naturalized.
- 3. B. CAMPESTRIS. Wild Navew. June—July. ⊙

 In wet fields and by the sides of becks. Near Easingwold and Thirsk. Gilling Beck, near Richmond.
- 4. B. OLERACEA. Sea Cabbage. May—June. & Cliffs from Whitby to Staiths.

21. SINAPIS.

- 1. S. ARVENSIS. The Ketlock, and Charlock. May—June. ①
 In cultivated fields a most troublesome weed.
- S. TENUIFOLIA. Narrow-leaved Wall Mustard. June—October. 24
 In the church yard, Old Malton. On old walls at Pontefract.

22. RAPHANUS.

1. R. RAPHANISTRUM. Wild Radish. June—July.

In corn fields and by way sides, frequent.

ORDER VII. VIOLACEÆ.

1. VIOLA.

1. V. HIRTA. Hairy Violet. April. 24

Shady places and hedges on limestone. Thorp Arch. Hovingham woods. Pickering Knoll, between Hovingham and Slingsby. Bramham. Settle, Gordale, and other parts of Craven. Castle Howard. Londesbro'. Copgrove. Mackershaw wood, and other places, near Ripon. Frequent near Doncaster. On the top of Round Howe, near Richmond.

2. V. odorata. Sweet Violet. March—April. 4

Hedges and sides of pastures. The white flowered variety is not very uncommon in this county; and at Loversall, near Doncaster, it occurs with white, purple and lilac flowers.

Triphæna fimbria, (broad-bordered yellow underwing,) and Actebia præcox, (the Portland Moth,) feed on this species.

3. V. Palustris. Marsh Violet. April. 21

In turfy bogs and meadows. At Holwick and Ravenroyd, above Bingley. Black plantation and Downholme moor, near Richmond. Norland moor, near Halifax. Terrington carr. In Teesdale very common. Marsh on Crooks moor, near Sheffield. Holly Hill wood, near Castle Howard. Widdale fell. Wensleydale. Sneaton low moor, near Whitby.

A Viola (probably a variety of this species) with roundish kidney-shaped leaves and yellow flowers, was found on the Wolds near North Dalton, in the spring of 1834, by Mr. Fenton, of Londesbro',

4. V. CANINA. Dog's Violet. April—August. 4. On road sides and hedges, common.

Argynnis paphia (silver washed Fritillary) and A. Aglaia (dark green Fritillary) feed on this plant. A very rare variety of the last named species (Queen of England Fritillary, Haworth.) was taken in Weldrake-lane, near York, in 1827, and is now in the possession of Mr. Weaver, of Birmingham.

- 5. V. LACTEA. Cream-coloured Violet. May. \mathcal{V} On boggy heaths. Thorne moor. Mr. James Backhouse.
- V. FLAVICORNIS. Yellow-spurred Violet. April—June. 24
 In pastures in Teesdale, along with V. lutea. Knavesmire, near York. Near Halifax, frequent.
- 7. V. TRICOLOR. Pansy. Heart's-ease. May—September. ⊙
 In cultivated fields, common.

The beautiful caterpillar of Argynnis Adippe (the high brown Fritillary) feeds on this species.

8. V. LUTEA. Yellow Pansy. May—September. *\mu\$

In mountainous pastures above Gordale. Langleydale. Settle. Malham. Arkendale. Sawley moor, near Ripon. Moors above Wensley. Teesdale. Kirby hill, near Boroughbridge. Londesbro'. Ais-la-beck, and the race-ground, Richmond. Near Illingworth and Warley, &c. in the parish of Halifax.

ORDER VIII. CISTINEÆ.

1. CISTUS.

- 1. C. Marifolius. Hoary Dwarf Cistus. June—July. 12

 On alpine rocks. On the top of Cronkley fell, Teesdale. Only on the 'sugar limestone.'
- 2. C. HELIANTHEMUM. Dwarf Cistus. June—August. 12
 On chalky or limestone soil. Tadcaster. Thorp Arch. Bramham, and along the whole of the Wolds. Helks wood. Malham cove. About Helmsley. Kirkby Moorside, &c.

ORDER IX. DROSERACEÆ.

1. DROSERA.

1. ROTUNDIFOLIA. Round-leaved Sun-dew. July—August. 4
On turfy bogs, frequent. Very common near York, and I believe throughout the county.

The name Sun-dew, seems to be derived from a very remarkable circumstance in the appearance of these plants; the leaves are covered with hairs supporting small drops or globules of a pellucid liquor-like dew, which continue in the hottest part of the day, and in the fullest exposure to the sun. (The following appropriate lines occur in a little Botanical Work, entitled the 'Wild Garland.')

"By the lone fountain's secret bed,
Where human footsteps rarely tread,
'Mid the wild moor, or silent glen,
The SUN-DEW blooms unseen by men;
Spreads there her leaf of rosy hue,
A chalice for the morning dew,
And, ere the summer's sun can rise,
Drinks the pure waters of the skies."

2. D. Longifolia. Long-leaved Sun-dew. July-August. 2

Equally common with the former near York, but not in other places. Near Doncaster.

3. D. ANGLICA. Great Sun-dew. June-August. 24

On spongy bogs, rooted amongst Sphagnum. Terrington carr, almost eradicated. Leckby carr, in abundance, specimens ten inches high. Thorne moor, near Doncaster. On the top of Blackstone edge, near the division stone that separates Yorkshire from Lancashire.

ORDER X. POLYGALEÆ.

1. POLYGALA.

1. P. VULGARIS. Milkwort. May-August. 24

In gravelly heathy pastures, frequent. Many beautiful varieties, well worthy of cultivation, are found in the neighbourhood of York.

ORDER XI. MALVACEÆ.

MALVA.

1. M. SYLVESTRIS. Common Mallow. May—August. 24
Hedges, waste ground, and road sides, frequent.

 $Apion\ Malvæ, oxurum\ and\ meum,\ and\ Haltica\ rufipes,\ inhabit\ the\ different\ species.$ The larva of Larantia cervinata (the Mallow) feeds on them.

- 2. M. ROTUNDIFOLIA. Dwarf Mallow. June—September. ①

 By way sides in towns and villages.
- 3. M. Moschata. Musk Mallow. June—August. 24

By the sides of woods and road sides, not common. Near York. Bolton bridge. Hovingham. Wentbridge. Near Sheffield. Field near Mawthorpe dale, and near Castle Howard. In the lane from Richmond to Skeeby. Lane near Car House, Doncaster. Between Bilton and Cowthorpe. Esk dale, near Whitby. About Gate Head and High Royd, in Warley, near Halifax.

ORDER XII. HYPERICINEÆ.

1. HYPERICUM.

1. H. ANDROSÆMUM. Tutsan. July-August. 12

In thickets and woods. North Dean in Greetland, High Royd wood in Warley, and in a wood near the Triangle Inn, Sowerby, all in the parish of Halifax. Ruswarpe carr, near Whitby. Midgehole wood, nine miles west of Halifax. Crooks wood, near Sheffield. Londesbro'. Larpool wood, near Hawsker, three miles south of Whitby. Kilton wood, near Whitby.

The Whitby plant is said to flower in May and June.

- 2. H. QUADRANGULUM. Square-stalked St. John's-wort. July—Aug. $\mathcal U$ Woods and thickets, frequent.
- 3. H. Perforatum. Perforated St. John's-wort. July—August. 4

 Lanes and hedges, frequent.
- 4. H. Dubium. Imperforate St. John's-wort. July—August. 24

 Hovingham woods. In a stone quarry at Hutton, near Ripon.
 About Applegarth, near Richmond, abundant. On both sides of the Tees, above Middleton.
- H. нимігизим. Trailing St. John's-wort. July—September. 4
 In sandy heathy rather boggy pastures, frequent.
- 6. H. MONTANUM. Mountain St. John's-wort. July. 4

 Huddleston quarry, near Sherburn. Manor vale, Kirk

Huddleston quarry, near Sherburn. Manor vale, Kirkby. Lane between Hovingham and Calton moor. Whitcliffe limekilns, near Ripon. At Malham cove and Gordale. Thorp Arch. Near Ingleton.

7. Н. ніввитим. Hairy St. John's-wort. June—July. 4

Askham lane, near York. Huddleston quarry. Near Sheriff Hutton Castle. In the wood at Thorp Arch. Banks of the Derwent above Crambe bridge, and other places in that neighbourhood, frequent. Middlethorp ings. In Crawen.

- 8. H. Pulchrum. Small Upright St. John's-wort. July. $\mathcal U$ In woods and heathy places on clayey soil, frequent.
- 9. H. ELODES. Marsh St. John's-wort. August—September. \(\frac{1}{2} \) In spongy bogs amongst Sphagnum. On Stockton forest, Sandburn, and Strensall common, near York. Hookstone craggs, near Knaresbro'. Headingley moor. Bog below Addle bridge. Black moor. Piercy's moor, two miles from Castle Howard.

ORDER XIII. CARYOPHYLLEÆ.

1. DIANTHUS.

1. D. CARYOPHYLLUS. Clove Pink, or Carnation. July. 4

On the walls of Fountain's Abbey. On a rock in Thorp Arch wood. Specimens in the Yorkshire Philosophical Society's Herbarium from Studley woods, gathered by the Rev. J. Dalton.

2. D. Deltoides. Maiden Pink. July-October. 4

Sandy ground in Scampton park, between Malton and Scarbro'. In a gravelly place called the Coom, near Terrington, where it sometimes occurs with white flowers.

2. SAPONARIA.

1. S. officinalis. Soapwort. August—September. 4

In meadows by river sides, and under hedges. On the banks of the Ouse, two miles above York. Acomb church yard. Near Fulford. Near the castle, Scarbro'. Castle bank and Eastby, near Richmond. Near a rivulet below the village of Austwick, five miles north west of Settle. Near the river at Knaresbro'. Near Kirkstall Abbey. Shipton, near Market Weighton. Banks of the Swale, by Topcliffe. Cottingham moor. Broughton, near Malton.

3. SILENE.

1. S. INFLATA. Bladder Campion. July. 4.
In fields and by road sides, frequent.

2. S. MARITIMA. Sea Campion. August—September. 4

Red scarr, near Downholme, four miles east of Reeth. On an almost inaccessible limestone cliff above the village of Wharfe, five miles north west of Settle. Although this range of rocks is some miles in length, the habitat of the plant does not extend above two hundred yards.

3. S. NOCTIFLORA. Night-flowering Campion, or Catchfly. July—Aug.
Fields at Thorp Arch and Wetherby. In sandy fields between Redcar and Marske, amongst corn. By the foot road from Thirsk to Thirkleby. Near Ripon. About Copgrove, common. East moors, half a mile from Castle Howard, and in Bulmer fields.

4. S. Armeria. Lobel's Catchfly. July—August.

Banks of the Ribble, half a mile below Settle. Probably escaped from a garden.

5. S. NUTANS. Nottingham Catchfly. June—July. 4. On the rocks Abbey plain, Knaresbro'.

6. S. OTITES. Spanish Catchfly. July—August. 4

East moors, near Castle Howard. (Mr. R. Spruce, Ganthorpe.) There are specimens from this locality in the Herbarium of the Yorkshire Philosophical Society, gathered by W. Middleton, Esq.

4. LYCHNIS.

- 1. L. flos cuculi. Ragged Robin. June. 4
 In moist meadows, frequent.
- L. DIOICA. Red or White Campion. May—June.

 Var. α. L. DIURNA. Not so abundant in many places as L. vespertina.
 - Var. β. L. VESPERTINA. Frequent in most parts of the county.
 - Var. γ. Heslington fields, near York.

The larva of ${\it Miselia\ compta}$, (the Marbled Coronet,) and of ${\it Hadena\ Cucubali}$, (the Campion,) feed on this species.

5. AGROSTEMMA.

1. A. GITHAGO. Corn Cockle. June—July. ©
In corn fields a troublesome weed.

6. SPERGULA.

Cassida Spergulæ is found upon this plant.

- 2. S. Nodosa. Knotted Spurrey. July—August. 4

 In moist sandy ground. Tilmire, Hob moor, Knavesmire, and Stockton, all near York. Bramham moor. Near Settle. Malham, &c. &c. Yearsley moor, and other moors in that neighbourhood.
- 3. S. Subulata. Awl-shaped Spurrey. July—August. 4. On barren sandy heaths. On Barnby moor.

7. SAGINA.

- 1. S. PROCUMBENS. Procumbent Pearl-wort. May—August. 4
 Sandy ground and barren places, very common.
- 2. S. APETALA. Small-flowered Pearl-wort. May—June. ©
 In pastures and heathy ground on gravelly soil.

8. ARENARIA.

- A. PEPLOIDES. Sea Sandwort. June—July.

 On the sandy sea shore. North sands, Scarbro'. Mouth of the Tees at Coatham. Near Whitby.

- 3. A. Serpyllifolia. Thyme-leaved Sandwort. June—September. ①
 On walls and dry sandy places, very frequent.
- A. TENUIFOLIA. Fine-leaved Sandwort. June—July. O
 Dry sandy meadows and pastures. Barton heights, near Castle Howard. Walls of Fountain's Abbey. (Gravel pits near Copgrove, B. G.) In a field near Kirkham Abbey.
- 5. A. VERNA. Vernal Sandwort. May—August. 4
 On rocks in mountainous situations. Near the Strid, Bolton Abbey. Banks of the Swale, about Applegarth. Malham tarn, abundant. At Stockdale, three miles above Settle; also at Attermine, near Settle. Pateiey bridge, Wensleydale. On Ingleborough. On the sugar limestone on the top of Cronkley fell, in great abundance.
- 6. A. Rubra. Purple Sandwort. June—September. ⊙
 In sandy fields and lanes, frequent.
- A. MARINA. Sea Spurrey Sandwort. June—July.
 Bog Hall, near Whitby. On the marshes at Coatham. On the pier at Scarbro'.

9. CERASTIUM.

- 1. C. AQUATICUM. Water Mouse-ear Chickweed. July. \mathcal{U} Watery places and banks of rivers. Near York and Hull, frequent.
 Beverley.
- 2. C. VULGATUM. Broad-leaved Mouse-ear Chickweed. April—May. ⊙ Waste ground and on walls, common.
- 3. C. VISCOSUM. Narrow-leaved Mouse-ear Chickweed. May—Sep. 4. In meadows, pastures and waste ground, frequent.
- C. SEMIDECANDRUM. Little Mouse-ear Chickweed. Mar—Apr.

 On old walls near villages. Near Terrington. York. Ellershaw, near Ripon. Near Doncaster.
- C. TETRANDRUM. Four-cleft Mouse-ear Chickweed. May—June. ⊙
 On the sandy sea coast. Whitby. Coatham and Redcar. Flamborough Head, on a wall near the lighthouse.
- 6. C. ARVENSE. Field Chickweed. May—August. 24

 At the foot of walls, as well as in meadows and pastures near York, sparingly. Abundant on the magnesian limestone. Coneysthorpe, and on the road between Ganthorpe and Terrington. Near Doncaster. Between Wilberfoss and Barmby, near Pocklington, abundant.

The following larva feed upon the different species:—Arctia Caja, (the Great Tiger Moth;) Arctia Villica, (the Cream-spot Tiger Moth;) Triphæna Janthina, (the Yellow Underwing;) Graphiphora C. nigrum, (Setaceous Hebrew Character;) Mythimna grisea, (Bright-eyed Clay Moth;) Mythimna conigera, (Brown-line bright-eye Moth;) and Mythimna turca, (the Double Line.)

10. STELLARIA.

1. S. NEMORUM. Wood Stitchwort. May-June. 24

In moist woods. Several places at Castle Howard. In the Oxcar's wood, and by the river side at Crambe beck. Heath, near Wakefield. Ravenroyd, near Bingley. Thorp Arch. Applegarth, near Richmond. In New Hall wood, three miles south west of Settle. Above the forge, Kirkstall bridge. Coxwold. Studley and Hackfall woods. Woods near Halifax, very abundant.

2. S. MEDIA. Common Chickweed. March—November. ⊙
Common everywhere.

Withering remarks, that those who have only seen this plant in its usual state as garden *Chickweed*, would hardly know it again in woods, where it sometimes exceeds half a yard in height, and has leaves near two inches long and more than one broad; resembling in its habit *Stellaria nemorum*, or *Cerastium aquaticum*; distinguishable, however, from the latter, by the number of pistils, and from the former, by the hairy ridge extending along the stem.

- 3. S. HOLOSTEA. Greater Stitchwort. May. μ Hedges and thickets, frequent.
- 4. S. Graminea. Lesser Stitchwort. May. \mathcal{U} In heathy pastures on sandy soil.
- S. GLAUCA. Marsh Stitchwort. June—August.

 In ditches and bogs. On Knavesmire and other places, near York. Selby. Near Danby Hall. Ditches about Thirsk. Swillington bridge. Beverley. Ripon. Banks of the Derwent, at Kirkham.
- 6. S. ULIGINOSA. Bog Stitchwort. June.

 In rivulets, ditches and watery spots. Ditches at Campeshire, and other places, near York. Highridge lane, near Giggleswick.

ORDER XIV. LINEÆ.

1. LINUM.

- L. USITATISSIMUM. Common Flax. July.

 In cultivated fields, frequent.
- L. PERENNE. Blue Flax. June—July.

 Bulmer field, at the end of the avenue leading to Castle Howard.

 Mackershaw wood, near Ripon. Near Malton. Near Ledston
 Lodge. Leyburn shawl, on rocks by the edge of the wood.
- 3. L. ANGUSTIFOLIUM. Pale Flax. July. 4

 Near Malton. (Mr. Brunton, in Turner and Dillwyn's Bot. Guide.)
- 4. L. CATHARTICUM. Purging Flax. June—August.

 In dry pastures, very common.

2. RADIOLA.

Thyme-leaved All-seed. July—August.

O 1. R. MILLEGRANA. On moist sandy heaths. Stockton, Langwith, and several other places, near York. Cowlton moor. Terrington carr.

Hambleton hills, pretty frequent.

ORDER XV. TILIACEÆ.

1. TILIA.

- 1. T. EUROPÆA. Common Smooth Lime-tree. Linden Tree. In groves and hedge-rows.
- 2. T. GRANDIFOLIA. Broad-leaved Downy Lime-tree.

Growing on the rock at Clink bank, near Richmond. Also in a wood south of the Round Howe.

The lime supports the larva of Smerinthus Tiliæ, (the Lime Hawk;) Lophopteryx Camelina, (the Cock's-comb Prominent;) Petasia Cassinea, (the Sprawler;) Endromis Versicolora, (the Kentish Glory;) Pæcilocampa Populi, (the December Moth;) Eriogaster lanestris, (the Small Egger;) Hypogymna dispar, (the Gipsy;) Lencoma vaw-nigra, (the Black V.;) Erthosia stabilis, (the Quaker;) Xylina petrificata. Acronycta Alni, (the Alder;) and Acronycta Psi, (the Dagger.)

ORDER XVI. ACERINEÆ.

1. ACER.

- Sycamore. Tree. 1. A. PSEUDO-PLATANUS. In woods and hedges near mansions.
- 2. A. CAMPESTRE. Common Maple. May-June. Tree. Hedges.

The seeds of the sycamore afford a pleasing instance of the care that nature takes for the preservation The seeds of the sycamore afford a pleasing instance of the care that nature takes for the preservation of her infant germs. In the seeds (soaked in warm water) we shall find the radicle and long radicle leaves of the future plant folded up in an extraordinary manner, with the minute leaves that are to succeed them folded in their bosom; these radicle leaves are beautifully green, a circumstance not to be expected, as all light is excluded by three coatings and a woolly wrapper that invest them.

The pollen affords a curious object for the microscope. It appears globular; but if touched with moisture, these globules burst open with four valves, which assume the form of a cross.

The black blotches which disfigure the leaves of both species, are caused by a minute fungus, Erineum

acerinum.

The Maple supports the larva of Lophopteryx cuculla, (the Maple Prominent;) Ptilophora variegata. Apatela aceris, (the Sycamore Tussock.)

ORDER XVII. GERANIACEÆ.

1. GERANIUM.

1. G. PHÆUM. Duskv Crane's-bill. May—June.

In thickets. In Rose-tree Bank wood, near Settle, rare. Scriven Park, near Knaresbro'. Lord Dundas's woods, near Richmond. By Newburgh mill, near Coxwold. About Clapham and Ingleton. Londesbro'. Sprotbro' broats, near Doncaster.

2. G. SYLVATICUM. Wood Crane's-bill. May—July. 4

By sides of woods and pastures. Near Bolton Abbey. In all the alpine meadows near Settle, on limestone. Banks of the Nidd, above Knaresbro'. In Teesdale. Wensleydale. Helmsley woods. Pateley bridge. Malham cove. Mulgrave woods. Richmond. Cotherstone fell.

- 3. G. FRATENSE. Blue Meadow Crane's-bill. May—July. 4

 In moist meadows and river banks, frequent; chiefly in limestone districts.
- 4. G. ROBERTIANUM. Herb Robert. May—October. ⊙
 In moist shady woods and hedges, very common.

Dothidea Robertiana may frequently be found upon the leaves and stems.

- G. LUCIDUM. Shining Crane's-bill. May—August. ①
 On walls and moist rocks. On the walls of Byland Abbey. Walls near Egglestone Abbey. In Teesdale, at Barnard Castle. Rocks at Knaresbro'. Coxwold. In Craven, common. Kirkham Abbey. Walls at Londesbro'. Richmond.
- 6. G. MOLLE. Dove's-foot Crane's-bill. April—August. ①
 Common everywhere.
- 7. G. Pusillum. Small-flowered Crane's-bill. June—September. ①
 In grass fields and waste places, not uncommon. Langwith and Clifton scope, near York. Near Boroughbridge, &c.
- 8. G. Pyrenaicum. Perennial Crane's-bill. June—July. 24

 Holdgate and Acomb, near York. Sowerby fields, near Thirsk.

 By the river between Bingley and Keighley. Londesbro'. Bottom
 of Pye Nest lane, near Halifax, where it was for many years very
 abundant, and where it was originally introduced by the late Mr.
 Bolton; now nearly eradicated.
- 9. G. ROTUNDIFOLIUM. Soft Round-leaved Crane's-bill. June—July. ⊙
 In waste ground and barren pastures. Near Copgrove. Knaresbro'.
- 11. G. COLUMBINUM. Long-stalked Crane's-bill. June—July. ⊙ In corn fields on limestone. Thorp Arch. Wetherby. Tadcaster. Roche Abbey. Coneysthorpe banks. Fields near Hildenley. Ayton forge, near Scarbro'. Wensleydale.
- 12. G. SANGUINEUM. Bloody Crane's-bill. July—September. 24

 On rocks near St. Robert's Church, Knaresbro'. In bushy places on the sides of the limestone rocks in various places about Settle. On the east side of the second hedge which goes from the south end of Hildenley wood to the Hildenley road. On the Hambleton hills. Near the sea, at Redcar. Grassington wood. Wharfedale. Gordale.

2. ERODIUM.

1. E. CICUTARIUM. Hemlock Stork's-bill. June—September. ①

In waste ground, frequent. A beautiful variety, with flowers of a

In waste ground, frequent. A beautiful variety, with flowers of a pure white, grows on the road side near Catterick bridge.

2. E. Moschatum. Musky Stork's-bill. June—July. 💿

In mountainous pastures. In Craven, common. (E. F.) Field near Dalby, five miles from Castle Howard. Between Sand Hutton and Upper Helmsley. On the road side between Wilberfoss and Barnby Moor House.

ORDER XVIII. OXALIDEÆ.

1. OXALIS.

1. O. Acetosella. Wood Sorrel. April—May. 24

In woods and shady lanes, abundant. A variety with purple flowers in the Black plantation, near Richmond. A beautiful pinkish-red flowered variety in Rokeby woods. With bright red flowers in the woods at Hovingham.

ORDER XIX. BALSAMINEÆ.

1. IMPATIENS.

I. Noli-me-tangere. Touch me not. July—August.
 Foot of the walls at Fountain's Abbey. Banks of the Skell, Studley. Londesbro'. Near Market Weighton.

ORDER XX. PORTULACEÆ.

1. MONTIA.

1. M. fontana. Water Chickweed. April—June. \odot

In watery places and by the sides of clear rills. Holdgate and on Knavesmire, near York. On peaty soil, near Halifax. Moor between Castle Howard and Slingsby.

ORDER XXI. CRASSULACEÆ.

1. COTYLEDON.

1. C. umbilicus. Navelwort. June—July. 4

On old walls. Lower cragg, near Mytholm royd, six miles from Halifax. On the road side near Old House, Sowerby, five miles west of Halifax. At Lane House, in Midgley, near Halifax.

2. SEDUM.

1. S. TELEPHIUM. Great Orpine, or Live-long. August. 4

On gravelly and sandy soil; also on limestone rocks. Heslington fields, Acomb and Fulford, near York. About Bradford. Clink Bank wood, near Richmond. In the wood and on the inaccessible limestone cliffs under Winskill, two miles north of Settle; also in the village of Wharfe, six miles north west of Settle. Near Stillington.

So retentive of vitality is this plant, that lathed frames covered with it have been adopted as chimney boards; and, if sprinkled with water once a week, will continue in verdure for months.

- S. DASYPHYLLUM. White Stonecrop. June—July. 4
 On old walls at Terrington. Not entirely destroyed, 1837.
- 3. S. ACRE. Biting Stonecrop. June. 4
 On walls and roofs, common.
- 4. S. SEXANGULARE. Insipid Yellow Stonecrop. July. 4

 On the ruins at Peasholm, near Scarbro'. On the left hand side, a little below Malham cove.
- 5. S. VILLOSUM. Hairy Stonecrop. June-July. 24

Hinkleham, near Settle. At Carr end, Wensleydale. By Weather-coat cave, at the foot of Ingleborough. In Teesdale. In boggy places on the moor between Settle and Kirkby. Also on Swarth moor, four miles north of Settle. Malham. Various places in Craven. A little above West Briscoe, at the bottom of Boulders dale, near Cotherstone. Near Carlton, in Coverdale.

S. REFLEXUM. Crooked Yellow Stonecrop. July.

On walls and thatched roofs. In the vale of York, and the North Riding, frequent.

3. SEMPERVIVUM.

1. S. TECTORUM. Houseleek. July. 4
On walls and cottage roofs, frequent.

4. RHODIOLA.

1. R. Rosea. Rose-root. May-July. 4

On a rock called Foal foot, at the summit of Ingleborough, to the north west. Maisbeck scarr and Cronkley scarr, in Teesdale.

The root when dried has the fragrance of a rose, much of which it loses in a cultivated state.

ORDER XXII. SAXIFRAGEÆ.

1. CHRYSOSPLENIUM.

- 1. C. ALTERNIFOLIUM. Alternate-leaved Golden-saxifrage. May-June. 2 On road sides and by the borders of rivulets in the mountainous parts of the West and North Ridings. Path side, near Fountain's Abbey. Bell Bank wood, near Bingley. Spring, under the Cliff wood, near Bradford. Billy Bank wood, near Richmond. Binn Royd clough, Norland, near Halifax. Pennant's clough, and other similar situa-tions, in the vale of Todmorden. In the rivulet at Hood Grange, near Thirsk. Newburg woods. Near Tanfield Hall. In Teesdale. Settle, as abundant as oppositifolia. Roche Abbey. Mr. Tatham's wood, near Ingleton. Under Whitsuncliffe, near Thirsk. In Esk dale, near Carmount.
- 2. C. oppositifolium. Opposite-leaved Golden-saxifrage. May-June. 2 In watery shady places with the foregoing, but more common.

2. ADOXA.

Tuberous Moschatell. April—May. 1. A. MOSCHATELLINA. Damp woods and shady places in the West and North Ridings, frequent.

3. PARNASSIA.

1. P. PALUSTRIS. Grass of Parnassus. September—October. In spongy boggy places in Heslington fields, Askham bogs, &c. &c. near York. On dry magnesian limestone hills, near Bramham. On

the cliffs from Scarbro' to Filey. Terrington carr. Kirkham. On red marl at Skeeby, near Richmond. Potteric carr, Doncaster. Beck dale, Helmsley.

4. SAXIFRAGA.

- 1. S. HIRCULUS. Yellow Marsh Saxifrage. August. \mathcal{I} Top of Boulders dale, two miles south south-west of Shacklesborough, and eight miles from Cotherstone, in an old course of the beck.
- 2. S. AIZOIDES. Yellow Mountain Saxifrage. June—September. In black boggy soil. On Ingleborough. Long Sleddale and Whitfell gill, near Askrigg. Widdy bank and Cronkley fell, Teesdale.
- 3. S. GRANULATA. White Meadow Saxifrage. April—June. Drv meadows and banks. Bottom of Collier hagg, near Helmsley. About Malham cove. West field and Gallow field, near Richmond. From Barnard Castle to Romaldkirk, frequent. Attermine cave, near Settle. Howthorpe, three miles from Castle Howard. In the valley beyond Chapman's pasture, near Scarbro'. Ruswarpe, two miles south west from Whitby. Between Cotherstone and Middleton. Wensleydale, forming a considerable feature in the meadows.

4. S. Oppositifolia. Purple Saxifrage. April. 4

On the top of Ingleborough. Very abundant on the east side of Pennigent, seven miles north east of Settle.

5. S. TRIDACTYLITES. Rue-leaved Saxifrage. April—May. O

On old walls and roofs. Heslington, Strensall, &c. near York. Bradford. Ilkley. Near Richmond, abundant. On walls on the side of the Tees, Barnard Castle. Near Settle. Ganthorpe. Terrington. Roche Abbey. Near Conisbro' Castle, and other places, near Doncaster. Ruswarpe, two miles south west of Whitby.

6. S. HYPNOIDES. Mossy Saxifrage. May—June. 4

West end of Penhill. Abundant about Malham and Settle, in alpine limestone pastures, both in dry and moist situations. Falcon clints, Teesdale. Wensleydale.

7. S. UMBROSA. London-pride Saxifrage. June. 4

In Thorp Arch woods. In Hesletine gill, Littondale, ten miles north north-east of Settle. Londesbro'. In a lane about half a mile from Haworth, leading to Isle in Oxenhope, in great abundance.

8. S. Stellaris. Starry Saxifrage. June—July. 2

On wet shady rocks. On Ingleborough. Londesbro'. Above Middleton, Teesdale. On the north east of Pennigent.

ORDER XXIII. SALICARIÆ.

1. PEPLIS.

1. P. PORTULA. Water Purslain. July-August.

O

In watery places. Tilmire, Stockton forest, and several other places, near York.

2. LYTHRUM.

1. L. SALICARIA. Purple Loosestrife. July—August. \mathcal{U} In ditches and watery places, frequent.

ORDER XXIV. RHAMNEÆ.

1. RHAMNUS.

1. R. CATHARTICUS. Buckthorn. May. 5

In hedges and waste ground near York, frequent. Knaresbro'. Thorp Arch. Richmond. Settle. Kippax. Doncaster, &c.

2. R. Frangula. Berry-bearing Alder. May. b

In damp woods and hedges. near York. Leckby carr. Hildenley wood, near Malton.

Askham bog, Langwith lane, &c. Cawklees wood, near Hovingham.

The larva of *Polyommatus Argiolus*, (the Azure Blue,) feeds on this plant; as also does that of *Gonepteryz Rhamni*, (the Brimstone Butterfly,) and on *R. Catharticus. Æcidium Rhamni* may frequently be found on the leaves at Langwith, near York.

ORDER XXV. ILICINEÆ.

1. ILEX.

1. I. AQUIFOLIUM. Holly. May. Tree.

In hedges and bushy places on dry hills.

O Reader, hast thou ever stood to see
The HOLLY TREE?
He that contemplates it well perceives
Its glossy leaves
Ordered by an Intelligence so wise
As might confound the Atheist's sophistries.

Below, a circling fence, its leaves are seen
Wrinkled and keen;
No grazing cattle through their prickly round
Can reach to wound;
But as they grow where nothing is to fear,
Smooth and unarm'd the pointless leaves appear.

I love to view these things with curious eyes,
And moralize;
And in this wisdom of the Holly Tree
Can emblems see,
Wherewith, perchance, to make a pleasant rhyme,
One which may profit in the after-time.

Thus, though abroad, perchance, I might appear
Harsh and austere
To those who on my leisure would intrude
Reserv'd and rude,
Gentle at home amid my friends I'd be,
Like the high leaves upon the Holly Tree.

SOUTHEY.

ORDER XXVI. CELASTRINEÆ.

1. EUONYMUS.

1. Е. EUROPÆUS. Spindle-tree. May. р

In hedges and thickets. Wood near the Priory gate, Knaresbro'. Hedges between York and Tadcaster. In Clink Bank wood, near Richmond. In Crow Nest wood, three miles north west of Settle. New Holme beck, two miles and a half north west of Whitby.

One of the four plants that the caterpillar of Acherontia Atropos, (the Death's Head,) has been found upon in this county.

ORDER XXVII. LEGUMINOSÆ.

1. ULEX.

1. U. EUROPÆUS. Furze Whin, or Gorse. May-December. 2

On sandy or gravelly heaths and commons. Road sides, &c.

The Whin affords food to but few lepidopterous insects. The larva of *Polyommatus Argiolus*, (the Azure Blue,) may sometimes be found upon it; also, *Euthemonia Russula*, (the Clouded Buff.)

2. U. NANUS. Dwarf Furze. August-October. 12

On the race-course at Doncaster. Gatherly moor, near the sand quarry. Near Richmond.

2. GENISTA.

1. G. TINCTORIA. Dyer's Weed. July—August. 12

On the dry borders of fields. Heslington fields, Overton wood, &c. near York. Hemsworth and Brompton. Found with double flowers near Ilkley wells, in 1828, by Mr. D. Smith, Curator of the Hull Botanic Garden. In a field at Ganthorpe, on the York road, four miles from Malton. At Hutton hill. Richmond. In great abundance near the villages of Wharfe and Clapham.

The whole plant affords the dyer a good yellow colour; and with woad a good green.

Apion Genista, and the larva of Hipparchus Cythisaria, (the Grass Emerald, or Green Carpet,) feed on this species.

2. G. ANGLICA. Petty Whin. May-July. b

On sandy heaths, from the vale of York to the height of 2,000 feet on the Grampians of Aberdeenshire.

3. SPARTIUM.

1. S. SCOPARIUM. Common Broom. Genista of old Authors. May-June. 12

On dry gravelly soil, frequent.

This humble Shrub was no less distinguished than the Rose herself during the civil wars of the four-teenth century; for a sprig of the *Planta Genista* was the adopted badge of Gefroi, Duke of Anjou, father of our Henry the Second: and from this cognizance he acquired the name of Plantagenet, by him transmitted to his princely descendants, who all bore it from Henry, who has been called the first royal sprig of *Genista*, down to the tyrant Richard, the last degenerate scion of the plant of Anjou.

"The storied urn may be crumbled to dust, And time may the marbled bust deface; But thou wilt be faithful and firm to thy trust, The memorial flower of a princely race."

The larva of Polyommatus Argus, (the Studded Blue;) Thecla Rubi, (the Green Hair Streak;) Calocampa exoleta, (the Sword Grass;) Hadena contigua, (the Beautiful Brocade;) Mamestra Pisi, (the Broom;) Dasychira fuscelina, (Dark Tussock;) Speranza limbaria, (the Frosted Orange;) also, Chrysomela litura, occellata and oblongoguttata, Lamprias chlorocephala, Apion neclonopum, and, rarely, A. Spartii, are found upon it.

4. ANTHYLLIS.

Kidney-vetch, or Lady's fingers. June-August. 11 1. A. VULNERARIA.

> In low moist meadows, as well as on dry barren limestone soil; but more abundant on the latter. Clifton ings, near York. Tadcaster and Thorp Arch, abundant. Castle yard, Scarbro'. On the chalk wolds, frequent. St. Ann's hill, Castle Howard. Welburn moor. Ganthorpe broats. Wigginthorpe. Fields at Swinethwaite.

5. ONONIS.

1. O. ARVENSIS. Rest-harrow. June-August. Half Shrubby.

> In barren pastures and road sides, frequent. A beautiful white variety by the side of the Ouse, three miles above York; likewise near Suett carr, seven miles north of York.

The larva of Heliothis marginata, (the Bordered Sallow,) feeds on this plant; likewise Polia tincta, (the Silvery Arches.)

6. ASTRAGALUS.

Wild Liquorice. June. 1. A. GLYCYPHYLLOS. 21

> On chalky or gravelly soil in woods and borders of fields. At Thorp Arch. Monk Fryston. Hilly field at Kippax. Hildenley wood. Cliffs near the White Nab, Scarbro'. By the road side from Flaxby to Allerton park, and other places near Knaresbro', frequent. In the foot road from Cover bridge to East Witton. Near Sleningford. Cawklees Bank wood, near Nunnington.

The late John Atkinson, Esq. of Leeds, detected Apion astragali on this plant in one of the lanes at Kippax, and communicated it to the author of Lepidoptera Britannica, (A. H. Haworth, Esq.) by whom it was described in the Transactions of the Entomological Society of London, vol. 1, p. 339, a work now become extremely scarce. The writer of this note, in June, 1824, accompanied Mr. Atkinson to the above locality, but the plant had been eradicated and consequently the insect could not be found. That neighbourhood is, however, to the Botanist and Entomologist, a very interesting one.

The larvæ of Ophiusa lusoria, (the Black Neck.) Polynommatus Alexis, (the Common Blue,) Anthrocera Hippocrepides, and Zylina conspicillaris, (the Silver Cloud,) feed on this species.

Purple Milk-vetch. June-July. 2. A. HYPOGLOTTIS.

> On dry limestone hills. Jack Daw cragg, a large stone quarry, two miles west of Tadcaster. Road sides from Sherburn to Huddlestone quarry. Thorp Arch. Langton wold. Lime hills at Kippax. Seamer moor. By the road side from Malton to Settrington. Near the pyramid at Castle Howard. Near Hazelwood. Pigburn fields, near Doncaster. On Welburn moor. Clifford moor, near Wetherby. On the Malton road, three miles and a half from Scarbro'.

7. MELILOTUS.

Melilot. June-July. ① 1. M. officinalis.

> Borders of fields and road sides on sandy or gravelly soil. Near York, frequent. A variety with white flowers (M. leucantha, of Hooker,) near Bishopthorpe, and other places.

8. TRIFOLIUM.

- 1. T. ORNITHOPODIOIDES. Bird's-foot Trefoil. June—July. ①
 On the south road, half a mile from Tadcaster.
- 2. T. REPENS. White or Dutch Clover. May—September. 4

 In meadows and pastures, common. A variety with dark purple leaves not uncommon.
- 3. T. PRATENSE. Purple Clover. May—September. $\mathcal U$ In meadows and pastures.
- 4. T. MEDIUM. Zigzag Trefoil. July. 4.

 Clink bank, on the White Dog, near Richmond. Fields near Hovingham Spa. Crompton, Cover, and other places, near York.
- T. SCABRUM. Rough Rigid Trefoil. May—June. ⊙
 In dry sandy lanes. Lane leading from Acomb to the Ouse, near York. Near the castle, Scarbro'. Ellershaw hill, near Ripon.
- T. STRIATUM. Soft Knotted Trefoil. June.
 Olink bank, near Richmond. Bowbridge and Cankley mill, five miles from Sheffield. Near Lobster House, on the road from York to Malton.
- 8. T. FRAGIFERUM. Strawberry-headed Trefoil. July—August. 24
 In wet pastures on black boggy soil. Knavesmire, near York.
- 9. T. PROCUMBENS. Hop Trefoil. June—July. ⊙
 In dry fields or pastures, not uncommon.
- T. MINUS. Lesser Yellow Trefoil. June—July. O
 In dry gravelly fields, common.
- 11. T. FILIFORME. Slender Yellow Trefoil. June—July.

 In sandy or gravelly grassy pastures.

The different species of Trefoil exhibit a striking exemplification of spontaneous movement in vegetables, both leaves and flowers appearing to court the light with avidity, by regularly following the course of the sun. They afford nourishment and protection to numerous insects, which may be taken by brushing clover fields with a brushing net; amongst them may be found, Melitaa Cinzia, (the Glanville Fritillary; Polynomnatus Alsus, (Small Blue;) Polynomnatus Argus, (Sliver-studded Blue;) Anthrocera Melilota Trifbit and Loti, (the Burnets;) Lassicampa Trifbit, (the Grass Egger;) Dasychira fascelina, (the Dark Tussock;) Orthosia litura, (the Brown-spot Pinion;) Mamestra Suasa, (the Dog's Tooth;) Acontia Solaris, (the Black Kidney;) Euclidia glyphica, (the Burnet;) Apion Melilotum; A. Loti; A. flavifemoratum; A. vicinum; A. assimile; &c.

9. LOTUS.

1. L. CORNICULATUS. Common Bird's-foot Trefoil. June—September. 4.

Open pastures and way sides, common.

The larva of Thymele Tages, (the Dingy Skipper,) is found on this plant.

2. L. MAJOR. Greater Bird's-foot Trefoil. July—August. 24
In wet bushy places and hedges, frequent.

10. MEDICAGO.

- 1. M. SATIVA. Purple Medick, or Lucern. June—July. 24

 In dry calcareous soil, where it probably has been cultivated in the neighbourhood. Heslington fields, near York. Bridlington. On the Wolds, &c. &c.
- 2. M. LUPULINA. Black Medick, or Nonesuch. May—August. ⊙
 In meadows, pastures and cultivated fields, frequent.
- 3. M. MACULATA. Spotted Medick. May—June. ①
 On the castle hill, Scarbro'.
- M. FALCATA. Sickle Medick. June—July.
 — Dry gravelly situations. East end of Cawklees wood, near Hovingham.

The larva of Euclidia Mi, (the Shipton Moth,) and Lasiocampa Trifolii, (the Grass Egger,) is sometimes found on this plant.

11. ERVUM.

York.

2. E. HIRSUTUM. Hairy Tare. June—August. ⊙

In a plantation half a mile south east of Terrington. Too frequent near York.

12. VICIA.

1. V. SYLVATICA. Wood Vetch. July-August. 24

In woods at Castle Howard. Slingsby. Hackness. Mulgrave. Hovingham. Stanley clough, near Todmorden. The Foss, near Richmond. Woods on the banks of the Greta, near Greta bridge. Barrow cliff, near Scarbro'. Raincliffe wood. Mr. Tatham's wood, near Ingleton. Under Leyburn shawl, Wensleydale.

The most elegant of our British Climbing Plants, and well deserves a place in the garden. Scott beautifully describes this climber.

"And where profuse the Wood Vetch clings Round ash and elm in verdant rings, Its pale and azure-pencilled flower Should canopy Titania's bower!"

Apion Viciæ is found upon the plant; likewise the larva of Mamestra Pisi, (the Broom.)

- 2. V. CRACCA. Tufted Vetch. July—August. 4

 Frequent in hedges, to which its blueish purple blossoms are a great ornament.
- 3. V. SATIVA. Common Vetch. May—June. 4. In corn fields and cultivated ground.
 - β . On the road from Elland to Brighouse, four miles from Halifax.
- 4. V. LATHYROIDES. Spring Vetch. April—May. ①

 In the sand pits at Acomb, near York; a small diminutive plant exceedingly difficult to find. In the lane leading from Acomb to the Ouse. Near Beverley. On Hutton moor, four miles west of Stokesley.
- 5. V. SEPIUM. Bush Vetch. May—June. 24

 By the sides of woods and under hedges, frequent. With cream coloured flowers in a meadow at Stackhouse, near Settle.

This plant is worthy the attention of the farmer, as on light soils it vegetates early in spring, and continues growing until late in autumn, and may be cut to advantage four or five times the second year after sowing; it does not thrive on clayey or boggy land.

- 6. V. BITHYNICA. Rough-podded Purple Vetch. July—August. 24
 Gravelly corn fields, pastures and ditch banks, near Doncaster. On the sea banks between Whitby and Land's end. Upgang beck, near Whitby.
- V. ANGUSTIFOLIA. Narrow-leaved Crimson Vetch.

 Either the above, or a variety of V. Sativa with narrower leaves, solitary flowers, and the lower leaflets approaching to heart-shaped, is found in Heslington fields, near York. Near Halifax, not uncommon.

13. LATHYRUS.

- L. LATIFOLIUS. Broad-leaved Everlasting Pea. June—July.

 Near Kettleness, seven miles north west of Whitby, not far from the alum works.
- 2. L. SYLVESTRIS. Narrow-leaved Everlasting Pea. July—August. 4
 Barrow cliff, Scarbro'. In a lane near Slights. Near Welspool.
- 3. L. PRATENSIS. Yellow Meadow Vetchling. July—August. 4
 In meadows and pastures, common.
- L. PALUSTRIS. Blue Marsh Vetchling. July—August. 21
 In boggy meadows. Found in Heslington fields, near York, about twenty years ago, by the Rev. W. Hinckes. Marshes near Beverley.
- 5. L. HIRSUTUS. Rough-podded Vetchling. July. ⊙
 In cultivated fields near Elvington.

14. OROBUS.

- O. TUBEROSUS. Bitter Vetch. Heath Pea. May—July.

 ¹
 ¹
 - In a wood at Scout, near Todmorden.

F

15. ORNITHOPUS.

1. O. PERPUSILLUS. Bird's-foot. May. O

In dry sandy lanes and on banks. On the road from York to Acomb. Tadcaster. Several places in Leeming lane. Hutton moor. Ripon. Near Dunnington wood and Kexby Stray lane. Near Halifax, very common.

The curved legume bears a very striking resemblance to a bird's foot.

16. HIPPOCREPIS.

1. H. COMOSA. Tufted Horse-shoe Vetch. June—August. 24

On limestone. On Cronkley fell, in Teesdale, at an elevation of above 1,500 feet. About Malham, Settle, Giggleswick, Kilnsey and Wharfe. Aysgarth force, Wensleydale.

17. HEDYSARUM.

1. H. ONOBRYCHIS. Saint-foin. Cock's-head. June—July. 4

Between Tadcaster and Ferrybridge. Thorp Arch. Wetherby. Kippax. On the Wolds at Ganton, Foxholes, &c. A pretty garden plant.

ORDER XXVIII. ROSACEÆ.

SPIRÆA.

1. S. FILIPENDULA. Dropwort. July. 4

Welburn, near Castle Howard. Near Thorp Arch. In a pasture at Ganthorpe. Very abundant at Kilnsey cragg, near Settle. In a lane near the second mile stone on the road from Halifax to Luddenden foot. In the lane near Otley hill, on the road from Richmond to Northallerton.

- 2. S. ULMARIA. Meadow-sweet. June—July. 24

 In moist meadows and on river banks, common.
- 3. S. Salicifolia. Willow-leaved Spiræa. July. 2

 Aske wood, near Richmond, in several moist places, naturalized.

2. PRUNUS.

1. P. DOMESTICA. Wild Plum. May. Tree.

In woods and hedges. It appears to have been sent out of the nurseries with the Blackthorn. Near Doncaster, and other places.

2. P. SPINOSA. Sloe, or Blackthorn. March—April. 72 In hedges, common.

The Black Thorn affords food and shelter to numerous insects; amongst others, Pieris Cratagi, (Black-veined White;) Vanessa Polychlorus, (the large Tortoise-shell;) Thecla Betuke, (the Brown Hair Streak;) Thecla Pruni, (the Black Hair Streak;) Thecla Spini, (Pale Brown Hair Streak;) Episema caruleocephala, (Figure of 8 Moth;) Trichiura Cratagi, (the Pale Oak Egger;) Eriogaster lanestris, (Small Egger;) Gastropacha Quercifolia, (the Lappet Moth;) and Orgyia antiqua, (the Vapourer;) &c. &c.

P. INSITITIA. Wild Bullace-tree. April. Tree.
 Hedges, near York. Pontefract. Thorp Arch, &c. Several varieties, with regard to the colour of the fruit, may be found near York.

- 4. P. CERASUS. Wild Cherry-tree. May. Tree.
 In woods and hedges, frequent. Woods at Thorp Arch.
- P. Padus. Bird Cherry. May. Tree.
 In woods and hedges in the mountainous parts of the county, frequent. Very abundant near Halifax. Near York, rare. Plentiful at Bolton. Shipley, &c. near Bradford.

3. RUBUS.

- 1. R. fruticosus. Common Bramble, or Blackberry. July—August. Description Very common in hedges and thickets. In the neighbourhood of Halifax it is not of very frequent occurrence; but in one or two situations in that neighbourhood, a most beautiful small variety occurs with flowers of a delicate purple, and the leaves on the upper side a fine dark shining green, the under side of which are quite as hoary as those of R. IDLEUS.
- 2. R. Suberectus. Red-fruited Bramble. July—August. \$\frac{1}{2}\$

 (Flora Dan. tab. 1992, Fas. 34, bona.)

 In woods and thickets. In the woods and lanes at Langwith, near York. Oliver's mount, Scarbro'. Dallow gill, near Ripley. In a moist wood near Hipswell Lodge, three miles south east of Rich-

mond. Malham.

- 3. R. CARPINIFOLIUS. Hornbeam-leaved Bramble. July—August. 12
- 4. R. IDÆUS. Raspberry. May—June. ¹2

 In woods and hedge banks, frequent. Woods near Bradford, Bingley, Halifax, &c.
- 5. R. CORYLIFOLIUS. Hazel-leaved Bramble. R. DUMETORUM Weihe and Nees, Rubi Germ. p. 99, tab. 45. A. July. b. Hedges at the Mount, York. Thorp Arch.
- 6. R. cæsius. Dew-berry. June—July. ½

 Under hedges, in the borders of fields, frequent. (Not found in the neighbourhood of Halifax.) Abundant about Thorp Arch.

- 7. R. NITIDUS. Smooth Shining Bramble. July—August. 12

 In woods and thickets. In the dell in the middle of a corn field near the farm house at Coalsgarth, near Richmond. Near Halifax.
- 8. R. RHAMNIFOLIUS. Buckthorn-leaved Bramble. July—August. 5. Whitcliffe limekilns. On the road to Applegarth, near Richmond. Langwith, near York. Askham bogs. Near Halifax.
- 9. R. PLICATUS. Plaited-leaved Bramble. July. 5 In hedges. Langwith, near York. Arncliffe. Cleveland.
- 10. R. маскорнуцция. Large-leaved Bramble. July—August. 5 In hedges, thickets, woods, &c.
- 11. R. LEUCOSTACHYS. White-clustered Bramble. July—August. 12

 Woods and thickets. In Aske wood, near Richmond. Ray wood,
 Castle Howard. Near Halifax.
- 12. R. KOEHLERI. Köchler's Bramble. July—August. 12. Clink Bank wood, near Richmond.
 - Var. γ. Overton wood, near York. (R. PALLIDUS. W. & N.) (R. AFFINIS.)
 - Var. S. R. KOEHLERI. (R. GLANDULOSUS.)

 Hedge by the road side between Earsley bridge and Huntington, near York.

These and many other varieties (for it appears almost impossible to find real specific distinctions in many of the reputed species of this most intricate genus.) may be met with in the more uncultivated districts of the county; and to any one possessing the hair-splitting propensities of Botanists, will be a source of much amusement and no small degree of perplexity. The writer of this note, during the summer of 1837, and in a district peculiarly favourable to the pursuit, paid much attention to them, without being able to arrive at any satisfactory conclusion; his observations, however, led to an opinion not only that they hybridise, but that soil and situation have considerable effect in producing much variation of pubescence on the flower stem, and calvx,—and that the form of the leaves is frequently influenced by similar circumstances. These remarks are not to be understood as applying to R. idæus, cessius, saxatilis, or chamæmorus.

13. R. SAXATILIS. Stone Bramble. June. 4

By the sides and in stony rather moist woods in the West Riding. In Kelcow wood, Stackhouse borrings, and in Winskill wood, all near Settle, on limestone. Round Howe and the wood south of Aysgarth, near Richmond. Helk's wood, Ingleton. Turner clough, in Rishworth, and Ogden clough, both near Halifax. On the banks of the Tees above Winch bridge, frequent. Scawton woods, near Helmsley. Whitfell gill, Wensleydale. Hackfall. Grassington wood and Kilnsey cragg, Wharfedale. Woods, near the Strid, Bolton Abbey. Widdale fell, Wensleydale.

14. R. CHAMEMORUS. Cloud Berry. June. 24

In deep moist black peaty soil on the highest moors. At the Way pit on Rishworth moor, and Robin Hood's bed on Blackstone edge. On Penhill, Wensleydale. Rye-loaf, and most of our high mountains. Ingleborough. Hudspope-head, and nearly all the high moors in Teesdale. Very common on the hills between Settle and Dalham. Widdale fell, and on Cam, Wensleydale.

The flowers of the Bramble are particularly attractive to insects, and yield an abundant harvest to the Entomologist.

4. FRAGARIA.

- 1. F. VESCA. Wood Strawberry. May—June. 4.
 In woods and thickets, frequent.
- 2. F. ELATIOR. Hautboy Strawberry. June—September. 4.

 In a plantation at Middlethorp, near York; likewise by the side of the ditch on Hob moor. In Teesdale, frequent. Near Helmsley. Near Richmond.

5. POTENTILLA.

- 1. P. FRUTICOSA. Shrubby Cinquefoil. June. 2

 On the banks of the Tees, from Greta bridge to the High force, Teesdale. (Near Doncaster. Mag. Nat. Hist.)
- 2. P. ANSERINA. Silver-weed. June—July. 24

 By road sides, frequent.
- 3. P. ARGENTEA. Hoary Cinquefoil. June—July. 4

 Specimens were brought to me from Plumpton, near Knaresbro'.
 (Samuel Hailstone.)
- 4. P. ALPESTRIS. Orange Alpine Cinquefoil. July. \(\frac{1}{2} \)
 In pastures above Gordale and above Malham. (S. Hailstone, Esq.)
 On the basaltic rocks at Winch bridge; and on Cronkley scarr and
 Falcon clints, in Teesdale. On the hill above Lords wood, near
 Settle.
- P. VERNA. Spring Cinquefoil. April—May.
 ¼
 Kelcow, near Giggleswick. Darrington leys, near Ferrybridge.
 Lords wood, near Settle.
- 6. P. REPTANS. Creeping Cinquefoil. June—August. 4. In meadows, pastures and by way sides, frequent.
- 7. P. Fragariastrum. Strawberry-leaved Cinquefoil. March—April. 4. On dry hedge banks, common.

6. TORMENTILLA.

- 1. T. OFFICINALIS. Tormentil. June—July. 24

 Heaths and barren pastures, frequent.
- 2. T. REPTANS. Trailing Tormentil. June—July. 4

 In the neighbourhood of Bradford. (S. Hailstone, Esq.) Cotcliffe wood, by the road side between Northallerton and Kepwick. At Brighouse, near Halifax. (E. F.) About Popplewell, Warley, and in a field bottom at Bracken bed, in Ovenden, near Halifax. Bank by the road side from Fulford to Heslington. From Bilton to Thorp Arch.

7. GEUM.

- G. URBANUM. Avens. Herb Bennet. May—August. 4
 In woods and dry shady hedges, frequent.
- G. RIVALE. Water Avens. May—July.

 In moist meadows and woods, most abundant in mountainous situations throughout the county. A pure white variety found near York, by O. A. Moore, Esq.

β. G. Intermedium (Ehrart,) in similar situations, but not so frequent.

8. DRYAS.

1. D. OCTOPETALA. White Dryas, or Mountain Avens. July—Aug. 24
On the top of Cronkley fell. On Arncliffe clouder, in Littondale, very abundant. A beautiful plant for rock work, and one of the few that will thrive well in a town garden.

9. COMARUM.

1. C. PALUSTRIS. Purple Marsh-cinquefoil. June—July. 4
In spongy bogs and ditches, frequent.

10. AGRIMONIA.

1. A. EUPATORIA. Agrimony. June—July. 24

By road sides and borders of fields, frequent.

11. ROSA.

1. R. RUBELLA. Red-fruited Dwarf Rose. July. 12

Near Sutton on the Wolds, going from Knapton. Cross cliffe, near Whitby. Blakehow, in the parish of Lastingham, eight miles north of Kirkby Moorside. On very poor sandy soil.

2. R. SPINOSISSIMA. Burnet Rose. July. 12

Near Thorp Arch, frequent. Temple hill, Hovingham. Road side between Abberford and Garforth. Between Stokesley and Stockton. Airton and other places, in Craven. Bramham. Kirk Leatham. Wilton. Saltburn. Crambe bridge. Crow Nest, three miles north west of Settle. High force, Teesdale. Cock Mill wood, Ruswarpe, near Whitby. Bramham, &c. in plenty. There is a curious variety which grows upon the hill above Cottingham on the road to Harewood, with the stems covered most densely with hooked prickles, broad at their base. (S. Hailstone. Esq.)

3. R. DONIANA. Dwarf Hairy Rose. June. b

Helks wood, near Ingleton. (Specimens received by S. Hailstone, Esq. from Mr. J. Howson.) Top of a woody bank, near Croft.

I found a rose growing near the Sulphur Well (or Stink Hole, as it is there called.) at Broughton, near stipton, which resembles R. doniana in its characters, save the peduncles are smooth as well as the receptacle, and not "setis fortibus armatum," as described by Woods, in his able Monagraph in Linn. Trans.—The peduncles and receptacle, in a specimen with which Mr. Woods favored me, are only slightly settgerous.—S. Halistone.

- 4. R. SABINI. Bristly Rose. July. 72
 Plentiful about Upleatham, towards Guisborough. (S. Hailstone, Esq.)
- 5. R. VILLOSA. Soft-leaved Rose. June—July. 7

 Near Wighill. Near Gargrave, and all the way to Settle. Hedges about Bradford, plentiful. Carlton lane, near Thirsk, plentiful. Richmond, common. Hob moor, and near Overton wood, York. Esk banks and Runswick bay, near Whitby. In a hedge by Hildenley wood, near Malton. Near Halifax.
 - Var. R. Pulchella. (Woods.) Hedges between Redcar and Kirk Leatham. On limestone rocks at Ingleton. (Woods, in Linn. Trans.)
 - Var. β. CERULEA. Friar's wood, near Ingleton. (Woods, in Linn. Trans.)
 - Var. δ. Suberecta. On a rocky limestone bank at Ingleton. (Woods.) Stackhouse lane, about two miles from Settle. (Mr. John Howson.)
- 6. R. TOMENTOSA. Downy-leaved Dog Rose. June—July. 2

 Clifton, Tang Hall lane, and other places, near York. Hedges near Ouseburn. Near Thirsk, frequent. Richmond, frequent. Near Settle. Banks of the Derwent. Head hagg, and several places near Coneysthorpe. Hedges and thickets, in many varieties. Forcett, near Richmond.
- 7. R. MICRANTHA. Small-flowered Sweet Brier. June—July. 2

 At Headley, near Bramham. (J. Backhouse, Esq.) Egton wood, on the north east side of the river between Egton bridge and Glazedale bridge, six miles south west of Whitby. Scotton moor, near Knaresbro'. Hedges near Bramham, Collingham and Boston.
- 8. R. Borreri. (E. F.) R. Inodora. (Hooker.) R. Dumetorum. (Eng.Bot.)
 Hedges about Bradford. Hedges by the foot road from York to
 Holdgate.
- R. CANIMA. Dog Rose. June. 52
 With all its varieties very common in hedges, thickets and woods.
- 10. R. SARMENTACEA. (Rosa Canina. Var. β Hook, Brit. Flor.) Langwith, near York. Frequent about Settle. Near Halifax. Common in hedges and bushy places.

R. GLAUCOPHYLLA. (Winch.) About Bradford.

Var. 5. At Settle and other places in the mountainous parts of the North of England. (Woods, in Linn. Trans.)

Var. E. At Settle.—Ib.

- R. ARVENSIS. Trailing Dog Rose. June. ½
 Common in hedges and bushy places about Bradford, Wakefield, Thorp Arch, Halifax, &c.
- R. RUBIGINOSA. The Sweet Brier. June. ½
 In hedges between Pickering and Kirkby Moorside.
- 13. R. DUMETORUM. Thicket Rose. June. Voods near Settle.

R. FORSTERI. Downy-ribbed Dog Rose. June—July. ¹2
 In hedges. Very common near Settle, and other places.

The different species support the following insects; *Pæcilocampa Populi*, (the December Moth;) *Orthosia cruda*, (the Small Quaker;) *Harpalyce fukuta*, (the Small-clouded Yellow;) *Lampropteryx bideata*, (the Shoulder Stripe;) *Anticlea derivada*, (the Streamer;) &c. &c.

12. ALCHEMILLA.

- 1. A. VULGARIS. Ladies' Mantle. June—August. 4
- 2. A. Arvensis. Break Stone, or Parsley Piert. May—October. ⊙
 In dry gravelly sandy soil and rubbish, frequent.

The larva of Harpalyce subtristata, (the Common Carpet,) feeds on this plant.

13. SANGUISORBA.

1. S. officinalis. Great Burnet. June—July. 4

In meadows and pastures on limestone, frequent.

14. POTERIUM.

1. P. SANGUISORBA. Sallad Burnet. June—August. 24
On limestone rocks and the chalk wolds, frequent.

ORDER XXIX. POMACEÆ.

1. MESPILUS.

1. M. OXYACANTHA. Hawthorn. May—June. 5
In hedges everywhere.

The following larva may be found upon the Hawthorn:—Pieris Cratægi, (the Black-veined White;) Episema cæruleocephala, (the Figure of 8 Moth;) Lasiocampa Quercus, (the Great Egger;) Trichiura Cratægi, (the Oak Egger;) Pæcilocampa Populi, (the December Moth:) Eriogaster lanestris, (the Small Egger;) Gastropacha Quercifolia, (the Lappet Moth;) Orgyia antiqua, (the Vapourer;) Porthesia chrysorrhæa, (the Yellow Tail;) P. auriflua, (the Brown Tail;) one of the greatest pests of our hedges; it feeds gregariously on various plants: in some years its increase is enormous. In 1782, prayers were ordered to be read in all churches, to avert impending calamity from the vast number of larva that abounded in that year; having despoiled every hedge and tree, it was feared that they would extirpate the growing corn and grass. Nistila Oryacantha, (the Green Brindled Crescent;) Acromycta tridens, (the Dark Dagger;) A. Euphrasia. Yponomenta Evonymella, (the Full Spotted Ermine;) and Y. padella, (the Small Ermine.) Some years these two species are nearly as desiruety to hedges in this neighbourhood as the Brown Tail. The diligent Entomologist may collect 400 or 500 species of insects from the blossoms of the Hawthorn during the time it is in flower, by beating it into a good bag net and carefully examining the contents.

2. PYRUS.

1. P. COMMUNIS. Wild Pear Tree. April-May. Tree.

Hedges north of York, sparingly. One stood five years ago near the third mile stone on the Scarbro' road.

The larva of Smerinthus ocellatus, (the Eyed Hawk;) Ægeria Culiciformis; and Ægeria Formiciformis, (the Flame-tipped Red Belt;) feed on this tree.

2. P. MALUS. Crab Tree. May. Tree.

In most hedges, and frequently planted in hedge rows as trees.

3. P. ARIA. White Beam Tree. May. Tree.

Thorp Arch woods. Rocks at Knaresbro'. (Mr. Brunton.) Rocks in crossing from Malham cove over the moors to Gordale. Downholme scarr, near Richmond. In Crow Nest wood, three miles north west of Settle. Winch bridge, in Teesdale.

4. P. AUCUPARIA. Mountain Ash. May. Tree.

In mountainous woods and hedges, frequent.

The larva of Acronycta strigosa may sometimes be found on this tree.

On the different species may be found the larva of the following lepidopterous insects:—Vanessa Polychloros, (the Large Tortoise-Shell;) V. Antiopa, (the Camberwell Beauty;) several of which splendid insects have been taken in Yorkshire. Smerinthus ocellatus, (the Eyed Hawk;) Egeria Culiciformis; E. Formioiformis, (the Finme-tipped Red Belt;) those two feed under the bark. Notodonta dromedarious, var. (the Small Iron Prominent;) Chaonia dodonea, (the Marbled Brown;) Clisiocampa Neustria, (the Tee Lackey;) Hypogymna dispar, (the Gipsy;) Baychira fixacclina, (the Dark Tussock;) D. pudibunda, (the Pale Tussock;) Orgyia antiqua, (the Vapourer;) Nudaria munda, (the Muslin;) Caradrina ambigua, (the Dotted Rustic;) Miselia compta, (the Marbled Coronet;) Harpalyce rubidata, (the Flame.) Beating the blossoms in spring, affords to the Entomologist the richest harvest in Coleoptera and Diptera. The larva of Pyrochroa rubens and coccinea, feed upon the decaying roots.

ORDER XXX. GROSSULACEÆ.

1. RIBES.

1. R. RUBRUM. Red Currant. May. b

Hedges, woods and by the sides of brooks. Truly wild near Settle. (Mr. Tatham.)

A small fungus, Stromatosphæria ribesia, may be found on the dead branches.

2. R. Petræum. Rock Currant. May—June. 12

On the banks of the Swale, abundant. Amongst the limestone rocks between Malham cove and Gordale. Bracken brow, two miles west of Settle, on sandstone. Near Cotherstone. Egglestone, near Barnard Castle.

3. R. Alpinum. Tasteless Currant. May. b

About Bradford, and Thornton in Bradford dale, abundant. Woods near Richmond, plentiful. Woods and hedges near Fountain's Abbey. Near Settle. Woods near Ripon. Near Apperley bridge. Hedges about Coxwold. Several places in Lunedale. In the woods at Helmsley. Londesbro'. Wood near Stainforth. Roche Abbey. Banks of the Greta.

- 4. R. NIGRUM. Black Currant. May. 5

 By the sides of the rivulets at Applegarth, near Richmond. Banks of the Derwent, and near York; an escape from gardens.
- 5. R. GROSSULARIA. Gooseberry. April. 2

 In hedges not far from towns and villages, frequent. Apparently wild on rocks at Roche Abbey. In Beckdale, Helmsley.

All the species of Ribes are the favourite food of numerous insects. We sometimes see the young branches die without any apparent cause; but, if closely examined, a small whitish caterpillar, with brown head and legs, will be found feeding on the pith; which produces the beautiful **Egeria Tipubiformis*, (the Currant Hawk.) **Polia flavocincta*, (the Large Ranunculus,) and *Gleas Satellitia*, (the Satellites, may also be found on the different species; also, **Abraxas grossulariata*, (the Currant Moth.)

ORDER XXXI. ONAGRARIÆ.

1. EPILOBIUM.

- 1. E. ANGUSTIFOLIUM. Rose-bay Willow-herb. June—July. 24

 On rocks and near the banks of rivers. On the rocks by the Greta, above Greta bridge. In Crompton's cover, near York, sparingly. On the rocks of Cronkley scarr, in Teesdale. Beyond the spa, Scarbro'. Bottom of the moor, near Bilsdale. Rock above Gordale scarr. Near Cotherstone. Banks of the Swale above Applegarth, near Richmond. On the banks of the river Calder, both above and below Copley mill, near Halifax, where it has grown for many years, but cannot be considered indigenous in that situation.
- 2. E. HIRSUTUM. Great Hairy Willow-herb. July. 4. By the sides of ditches, frequent.
- 3. E. PARVIFLORUM. Small-flowered Hairy Willow-herb. July. 4. In watery places and river banks.
- 4. E. Montanum. Broad Smooth-leaved Willow-herb. July. 24
 In dry shady stony places everywhere.
- 5. E. ROSEUM. Pale Smooth-leaved Willow-herb. July. 4

 In waste boggy ground or watery places. York, a weed in a garden, brought apparently in peat soil from Stockton common. (Rev. W. Hincks.)
- 6. E. TETRAGONUM. Square-stalked Willow-herb. July—August. 4
 In marshy places, frequent. Fulford gravel pits and other places, near York. Fields about Ganthorpe. Near Beverley. Richmond. Near Staindrop. Near Halifax.
- 8. E. Alsinifolium. Chickweed-leaved Willow-herb. July. 24
 In damp shady situations. On Cronkley scarr, Teesdale.

· On the different species may be found the larva of Deilephila Elpenor, (Elephant Hawk, M.) and Graphiphora C. nigrum, (the Setaceous Hebrew Character.)

2. ÆNOTHERA.

1. Æ. BIENNIS. Evening Primrose.

Native of Virginia. (Naturalized near Doncaster. Mag. Nat. Hist.)

The flowers of this beautiful plant expand just as the sun sinks below the horizon. Some of the exotic species open almost instantaneously; which is effected by a very sudden retraction of the calyx leaves, which are forcibly thrown against the peduncles, and followed by an immediate expansion of the petals. The Evening Primrose is a plant well adapted to the garden or shrubbery; it will flourish even in the smoky city. Bernard Barton's beautiful Poem has immortalized this stately plant.

"Fair flow'r, that shunn'st the glare of day, Yet lov'st to open, meekly bold, To evening's hues of sober grey Thy cup of paly gold;—

I love to watch at silent eve
Thy scatter'd blossoms' lonely light,
And have my inmost heart receive
The influence of that sight.

I love at such an hour to mark
Their beauty greet the night-breeze chill,
And shine, 'mid shadows gathering dark,
The garden's glory still.

For such, 'tis sweet to think the while, When cares and griefs the breast invade, Is friendship's animating smile In sorrow's dark'ning shade.

Thus it bursts forth, like thy pale cup, Glist'ning amid its dewy tears, And bears the sinking spirit up Amid its chilling fears.

But still more animating far,
If meek Religion's eye may trace,
E'en in thy glimmering earth-born star,
The holier hope of Grace.

The hope—that as thy beauteous bloom
Expands to glad the close of day,
So through the shadows of the tomb
May break forth Mercy's ray!"

ORDER XXXII. CIRCÆACEÆ.

1. CIRCÆA.

- 1. C. LUTETIANA. Common Enchanter's Nightshade. June—July. 4

 Moist shady places. In the neighbourhood of York, frequent.
- C. ALPINA. β. Mountain Enchanter's Nightshade. July.

 Woods at Sowerby bridge. Luddenden foot, Ripponden, &c. sparingly.

ORDER XXXIII. HALORAGEÆ.

1. MYRIOPHYLLUM.

1. M. SPICATUM. Spiked Water Milfoil. May—July. 24

In slow rivers, ponds and ditches. In the Foss at York, and ditches on Stockton common. In pools near Settle. In the brook below Giggleswick. In the lake at Castle Howard. Downholme moor, four miles east of Reeth. Near Doncaster.

2. M. VERTICILLATUM. Whorled Water Milfoil. June-July. 24

In the same situations as the last, but more frequent. The Foss at York. From Thirsk to Newsham. Near Topcliffe mill. Beverley. Hull. Ripon. Banks of the Derwent. Near Doncaster.

2. HIPPURIS.

1. H. VULGARIS. Mare's-tail. Paddow-pipe. June-July. 4

Ditches and stagnant pools. Near the bridge at Sutton on Derwent, south east of York. Staveley carrs. Pond in Bell wood, near Knaresbro'. Mill dam, Boroughbridge. Near the bridge at Abberford. Slingsby carrs. In a branch of the Ribble, a mile and a half south west of Settle. Mill dam, Thorp Arch. In a brook near Aldborough. In the river Derwent, near Crambe beck. Londesbro'. Lune head. Seamer water, Wensleydale. In the mill dam at Stutton, near Tadcaster. Roche Abbey. Rossington bridge, near Doncaster. Costa, near Pickering. Knaresbro'.

ORDER XXXIV. UMBELLIFERÆ.

TRIBE I. DAUCINEÆ.

1. DAUCUS.

1. D. CAROTA. Wild Carrot. June—August. & On the borders of fields, frequent.

TRIBE II. CAUCALINEÆ.

2. CAUCALIS.

1. C. DAUCOIDES. Bur-parsley. June. O

Borders of Fields. Thorp Arch. Kippax. Roche Abbey. Near Malton, not unfrequent. Between Thornborough and Tanfield. Knaresbro'. Hildenley wood, and near Whitwell.

3. TORILIS.

- T. Anthriscus. Upright Hedge-parsley. July.

 In hedges by road sides, frequent.
- T. INFESTA. Spreading Hedge-parsley. July.

 Corn fields, near Ripon. Heslington fields, near York.
- T. NODOSA. Knotted Hedge-parsley. May—June. ①
 On banks and borders of fields. West end of Hildenley wood, in corn fields. Castle bank, Richmond. Redcar and Coatham, abundant. Heslington fields and near Dringhouses, York.

TRIBE III. SELINEÆ.

4. PASTINACA.

P. SATIVA. Parsnep. July. S
 Between Acaster and Tadcaster. Marrick Park, near Richmond.

5. HERACLEUM.

1. H. SPHONDYLIUM. Cow-parsnep. Hog-weed. July. of In hedges and moist meadows, frequent.

6. SELINUM.

1. S. PALUSTRE. Marsh Milk-parsley. July. 4

In marshes. Potteric carr, near Doncaster. In wet places near Beverley, frequent. Thorne moor. On the moors near York, sparingly. In the fields about Trent falls.

The larva of Papilio Machaon feeds on this plant.

7. IMPERATORIA.

1. I. OSTRUTHIUM. Great Masterwort. June. 24

In moist meadows. Near Seamer water, Wensleydale; and Cotherstone, near Barnard Castle. (B. G.)

TRIBE IV. ANGELICEÆ.

8. ANGELICA.

1. A. SYLVESTRIS. Wild Angelica. July. 24

In watery places and damp shady woods, very common.

TRIBE V. SESELINEÆ.

9. MEUM.

1. M. ATHAMANTICUM. Spignel, Meu, Bald-money. May—June. 24
In the second lane beyond the Booth Wood Inn, on the road from Ripponden to Oldham. Meadows at Mossdale-head, Wensleydale.

2. M. Fæniculum. Fennel. July—August. of On the ramparts, York.

10. CNIDIUM.

1. C. SILAUS. Meadow Pepper Saxifrage. August—September. 4
In rather moist situations. Thorp Arch. In Craven. Redcar.
Conisbro'. Tilmire, Askham, Heslington fields, Clifton ings, &c.
near York.

11. ÆTHUSA.

1. Æ. CYNAPIUM. Fools Parsley. July—August. . • In cultivated fields, frequent.

12. ŒNANTHE.

- E. FISTULOSA. Common Water Dropwort. July—August. 24
 In ditches and watery places, frequent.
- 2. Œ. CROCATA. Hemlock Water Dropwort. June—July. 24

 In watery places. Holywell plantation, Eccleshill, near Bradford. Brook at St. Ives, near Bingley. By the road side from Haweliffe bar to Glusburn. Side of the Leeds and Livrepool canal, near Silsden. Darnsfield, near Sheffield. New Hall, near Settle. Very plentiful near the confluence of the rivers Rye and Derwent, above Malton. Near Halifax; but throughout the whole of that extensive parish the preceding species does not occur.
- 3. Œ. PEUCEDANIFOLIA. Sulphur-wort-leaved Dropwort. June. 24

 In ditches, near Ripon. Near the river Derwent, in the parish of Sutton on Derwent.
- 4. (Ε. PHELLANDRIUM. Fine-leaved Water Dropwort. June—July. μ In ditches, frequent.

TRIBE VI. AMMINEÆ.

13. BUPLEURUM.

1. B. ROTUNDIFOLIUM. Hare's-ear. July. ①

Corn fields near Northallerton. Copgrove. Near Ripon. Malton, and several places on the Wolds. On the banks of the Went, near Ferrybridge. Near Kipling.

14. BUNIUM.

1. B. flexuosum. Earth-nut. Pig-nut. May—June. 2/4 In pastures, principally on gravelly soil, frequent.

15. PIMPINELLA.

- 1. P. SAXIFRAGA. Common Burnet-saxifrage. June—September. 4.

 In dry pastures. Knavesmire and Heslington fields, near York.
 Penny oaks and other places, near Bradford. Love lane, near the Swale, Richmond. Near Settle.
- 2. P. MAGNA. Greater Burnet-saxifrage. July—September. 4.

 In shady places under hedges, frequent. Moat, &c. at York. Tadcaster. Boroughbridge. Thorp Arch. Kippax. Hood Grange and Duckett ings, near Thirsk. On the banks of the Ure, near Ripon. Jervaux Abbey, near Middleham. Near Settle.

16. SIUM.

- 1. S. LATIFOLIUM. Broad-leaved Water-parsnep. July—August. 4

 In rivers and ditches. In ditches by the Foss, at York. Old Malton ings. Banks of the Rye and Derwent. Rivulet at Ganthorpe, near Castle Howard. Terrington carr.
- 2. S. Angustifolium. Narrow-leaved Water-parsnep. July—Sep. 4.

 Ditches and slow rivers. By the Foss, at York. Marshy ground, near Sedburg. Near the castle, Ravensworth. Bottom of Hag wood, Castle Howard. Near Settle, very frequent. Terrington carr. Ditch opposite Pontefract race-course.
- 3. S. Nodiflorum. Procumbent Water-parsnep. July—August. 24
- 4. S. REPENS. Creeping Water-parsnep. August—September. 4.

 In the ice-house pond at Castle Howard. Marshy ground on Tilmire, near York. Wet places in a wood below Boltby scarr, near Thirsk. Ditches near Beverley, frequent. On the road from Knaresbro' to Ripley, and by Scriven Park Lodge. By the Foss, York. Rivulet at Ganthorpe.
- S. INUNDATUM. Least Water-parsnep. May—June. 24
 In ditches and wet places overflowed in winter. Tilmire, Stockton forest, and other places, near York. In a large piece of water under Cronkley scarr, in Teesdale. Castle Howard ponds. Downholme moor.

17. CARUM.

1. C. CARUI. Caraway. June. &
Specimens from near Brimham rocks are in the Herbarium of the
Yorkshire Philosophical Society. Ditches near Hull.

18. SISON.

- 1. S. AMOMUM. Bastard Stone-parsley. August. ①
 In moist situations, near Hull.
- 2. S. SEGETUM. Corn Honewort. August. ⊙
 Said to be common near Hull, on the authority of the Rev. J. Dalton.

19. APIUM.

1. A. GRAVEOLENS. Wild Celery. August—September.

Edge of the north cliff, castle yard, Scarbro'. Staveley, near Knaresbro'. Saltmarshe, near Howden. Ditches, near Coatham. Near Marske. Side of Hamilton dyke, between Selby and Monk Fryston. Below Settle bridge, and on the Willow island, two miles south of Settle. On the wolds, above Londesbro'. Ditch at Ganthorpe.

20. CICUTA.

1. C. VIROSA. Water Hemlock. August—September. 4

Ditches, Old Malton ings. Newsham carr, near Thirsk. In a pond near the Park lawn, Knaresbro'.

21. ÆGOPODIUM.

1. Æ. PODOGRARIA. Gout-weed. May—June. 21
In shady damp places, not unfrequent.

TRIBE VII. SCANDICINEÆ.

22. ANTHRISCUS.

- 1. A. VULGARIS. Beaked-parsley. May. ①
 On hedge banks.
- 2. A. SYLVESTRIS. Wild Chervil. April—May. 24

 Very abundant in the rich meadows and pastures about Settle. In meadows near Halifax, frequent. York, Doncaster, &c. abundant.

23. SCANDIX.

1. S. PECTEN-VENERIS. Shepherd's-needle. Venus's Comb. June—Sep. 4
In gravelly cultivated fields, frequent.

24. CHÆROPHYLLUM.

1. C. TEMULENTUM. Rough Cicely. June—July. & Under hedges. Near York, common. Settle.

25. MYRRHIS.

1. M. odorata. Sweet Cicely. April—June. 24

In deep alluvial soil, near the banks of rivers and small streams. In Wensleydale, very frequent; and in Teesdale, not uncommon. In various places on the Ribble, below Settle. It likewise occurs sparingly at Kippax. Leeds. Knaresbro'. Bingley. Esk dale. Hackfall. Coxwold. Richmond. Helmsley. In the fields at Baxton House, two miles from Castle Howard. Kirkham Abbey. Mawthorpe dale. Very abundant at Meg's scarr, near Ripponden; and in Turner clough, Rishworth.

TRIBE VIII. SMYRNIEÆ.

26. SMYRNIUM.

1. S. OLUSATRUM. Alexanders. May. & Near Scarbro' Castle. Hurworth Church Yard. Near Beverley. Thorp Arch.

27. CONIUM.

1. C. MACULATUM. Hemlock. June—July. &

In waste ground in many parts of the county.

TRIBE IX. SANICULEÆ.

28. ERYNGIUM.

1. E. MARITIMUM. Sea Holly. July—August. **\mathcal{Y}\$
Cliff beyond the spa, Scarbro'. Shore of the Humber, between Patrington and Spurn Point. On the Durham side of the Tees, opposite Coatham marshes.

29. SANICULA.

1. S. EUROPÆA. Wood Sanicle. May—June. 24
In woods, abundant.

TRIBE X. HYDROCOTYLINEÆ.

30. HYDROCOTYLE.

1. H. VULGARIS. Marsh Pennywort. May—July. 24
In damp situations on peat, frequent.

ORDER XXXV. STELLATÆ.

1. GALIUM.

- 1. G. CRUCIATUM. Cross-wort Bed-straw. April—May. 4
 In hedges by road sides, frequent.
- 2. G. PALUSTRE. · Water Bed-straw. July—August. 21
 In moist meadows and ditches, frequent. Near York. Malton. Beverley. Helmsley. Kirkby Moorside. Coatham. Bradford.

- 3. G. WITHERINGII. Rough Heath Bed-straw. June—August. μ Fulford and other places, near York. Near Beverley.
- 4. G. SAXATILE. Smooth Heath Bed-straw. June—August. 24
 On heaths and hilly ground, frequent.
- 6. G. ERECTUM. Upright Bed-straw. June—July. 4

 Hob moor, near York. Oak wood, near Castle Howard.
- 7. G. VERRUCOSUM. Warty-fruited Bed-straw. June—August. ⊙
 In corn fields, rare. (Near Malton. Mr. R. Miller. E. F.)
- 8. G. TRICORNE. Rough-fruited Goose-grass. July.
 In rather dry situations, mostly in corn fields. Fields near Malton.
 Near Hildenley wood. Near Castle Howard. Thorp Arch, sparingly.
 Corn fields, near Redcar. Near Conisbro' Castle. Near Monk
 Fryston.
- G. PUSILLUM. Least Mountain Bed-straw. July.

 On limestone hills about Settle and Malham. Giggleswick scarr. Kelcow, near Settle.
- 10. G. VERUM. Yellow Bed-straw, or Rennet. July—September. 4 From the moist meadows on the banks of the Ouse, to the dry barren cliffs on the sea coast.
- 11. G. MOLLUGO. Great Hedge Bed-straw, or Goose-grass. June—Oct. 4/
 In hedges one mile south west of Tadcaster. Bramham. Thorp
 Arch. Between Gatherley moor and Greta bridge. Skeeby mill,
 near Brompton on Swale. Thickell, by the road side from Castle
 Howard to Malton. Near Bulmer.
- 12. G. ANGLICUM. Wall Bed-straw. June—August. ①
 On an old wall near Boynton, the seat of Sir G. Strickland, Bart. in the East Riding.
- 13. G. BOREALE. Great Mountain Bed-straw. June—August. 24

 In the natural alpine wood on the left side of the road between Kilnsey and Kettlewell. In the stony bed of the Tees from Middleton to Cauldron Snout, abundant. Rocks at the Strid, near Bolton Abbey. Banks of the beck between Skeeby and Brompton. Also at Clink bank, on the White Dog, near Richmond, but does not flower in this situation. At the east end of Malham cove. At Gordale and Kilnsey, very abundant.
- 14. G. APARINE. Goose-grass, or Cleavers. May—August.
 In hedges, frequent.

The different species afford food to the larva of the following insects:—Deilephila Elpenor, (the Elephant Hawk;) Deilephila Porcellus, (the Small Elephant;) Macrogiossa Stellaturum, (the Humming Bird;) Spilosoma Menthastri, (the Large Ermine;) Agrotis aquilina. Cidaria unidentaria, (the Dark-barred Twin-spot;) Harpalyce ocellata, (the Purple Bar;) Harpalyce Galiata, (the Galium Carpet;) Harpalyce tristata, (the Small Argent and Sable;) Anticlea rubidata, (the Flame;) and Anticlea sinuata, (the Royal Mantle.)

2. ASPERULA.

- 1. A. ODORATA. Sweet Woodruff. May—June. 4

 Frequent in dry woods on limestone, and gravelly soil.
- A. CYNANCHICA. Squinancy-wort. June—July.

 Near Tadcaster. Bramham. Thorp Arch, and Wetherby. Near Ripon. Knaresbro'. Appears on limestone only.

3. SHERARDIA.

S. ARVENSIS. Little Field Madder. June—August.

 In fields among corn, frequent.

ORDER XXXVI. CAPRIFOLIACEÆ.

TRIBE I. LONICEREÆ.

1. LONICERA.

- 1. L. Periclymenum. Honeysuckle. June—October. ¹2
 In hedges, frequent.
- 2. L. XYLOSTEUM. Fly Honeysuckle. July. A In Studley and Thorp Arch woods. (S. Hailstone, Esq.) Londesbro'.
- 3. L. CAPRIFOLIUM. Perfoliate Honeysuckle. May—June. 12
 In woods and thickets. At Londesbro'.

Upon the Honeysuckle may sometimes be found the larva of Vanessa C. album, (the White Comma;) Limenites Camilla, (the White Admirable;) Sesia Bombyliformis, (the Broad-bordered Bee Hawk Moth;) and Semiophora gothica, (the Hebrew Character.)

2. VIBURNUM.

- 1. V. LANTANA. Way-faring Tree. May. b
- 2. V. OPULUS. Guelder-rose. May—June. ¹/₂

 In damp woods and hedges in the vale of York, frequent. Near Thirsk. Clink bank, near Richmond.

3. SAMBUCUS.

1. S. EBULUS. Dwarf Elder. July. 4

In hedge banks and waste ground. In a field at Leckby, near Thirsk. Banks of the Tees, opposite to Nesham. Between North and South Ottrington. By the bridge at Sigston, near Northallerton. In the lane close to Leeming turnpike gate. Below Scarbro' Castle. Near Piersbridge. Cottingham, near Hull. Thorp Arch.

2. S. NIGRA. Common Elder. June. 12

In hedges, frequent.

Var. γ. With beautiful laciniated leaves, in a hedge on the road side near Scarbro', from York.

The larva of Mamestris Persicaria, may be found upon this plant.

TRIBE II. HEDERACEÆ.

4. CORNUS.

C. SANGUINEA. Dog-wood. June—July, ½
 In hedges in the vale of York, not rare. Clink Bank wood, near Richmond. Round Howe, near Downholme.

C. SUECICA. Dwarf Cornel. June—July.

In the Hole of Horcum, near Saltergate, on the road from Pickering to Whitby. Likewise found in great abundance near Hackness, by Messrs. Brown and Williamson, of Scarbro', July, 1835. Cross Cliff banks, near Pickering.

5. HEDERA.

1. H. HELIX. Common Ivy. October. ¹2

In woods and on old buildings, frequent.

ORDER XXXVII. LORANTHEÆ.

1. VISCUM.

1. V. Album. Misseltoe. May. 52

Parasitical on trees in woods and old orchards in the vale of York, not very unfrequent; but rare in other parts of the county.

ORDER XXXVIII. VACCINIEÆ.

· 1. VACCINIUM.

1. V. MYRTILLUS. Bilberry. May. b

On stony heaths and on turfy soil in woods, frequent.

The larva of Glæa Vaccinii, (the Chesnut;) Acronycta auricoma, (the Scarce Dagger;) Acronycta Euphrasiæ; feeds on this.

2. V. uliginosum. Great Bilberry. May. 12

On a boggy piece of ground north of Widdy Bank House, in Teesdale.

- 3. V. VITIS IDEA. Red Whortle-berry. Crow-berry. June. ¹/₂

 Dry places on heaths, in open woods, and on the tops of hills, in the West and North Ridings, very plentiful.
- 4. V. oxycoccus. Cran-berry. June—July. Trailing 2

 In turfy bogs, chiefly amongst sphagnum. Leckby carr, near Thirsk, in the greatest abundance. On the east end of Penhill. Moors, near Halfax. On the top of Cronkley fell, and most of the moors in that neighbourhood. Bogs in St. Thomas's fields, Seamer lane, near Scarbro'. Widdale fell, Wensleydale.

ORDER XXXIX. CAMPANULACEÆ.

1. CAMPANULA.

- 1. C. HYBRIDA. Corn Bell-flower. July—September.
 In dry gravelly or sandy fields. Near the gravel pits, Heslington fields. Corn fields about Thorp Arch. Bramham. Near the limekilns at Kippax. Gravel pit, near Copgrove. Coneysthorpe, one mile from Castle Howard. Plentiful about Londesbro', Knapton, and other places on the Wolds.
- 2. C. ROTUNDIFOLIA. Round-leaved Bell-flower. July—August. \mathcal{U} On heaths, walls, banks, and about the borders of fields, frequent; the variety with white flowers is not of rare occurrence.
- 3. C. RAPUNCULUS. Rampion Bell-flower. July—August. & The Forge valley, Hackness, near Scarbro'. (G. M.)
- 4. C. LATIFOLIA. Giant Bell-flower. July—August. 24

 In moist woods and hedge banks. Near Fulford church, and several other places near York. Bridle-way from Selby to Howden. Roche Abbey. Airedale and Wharfedale, frequent. Woods about Halifax. Banks of the river at Cankley hill, near Sheffield. Castle Howard. Heskith grange, near Boltby. Near Kippax. Several places near the road from Boroughbridge to Topcliffe. Near Richmond, frequent. Banks of the Don, near Sprotbro'. Eske banks, near Whitby.
- 5. C. RAPUNCULOIDES. Creeping Bell-flower. July—August. 4

 In woods and road sides. By the road side half a mile on the road from Darrington to Wentbridge. In the woods at Bramham.
- 6. C. GLOMERATA. Clustered Bell-flower. June—September. 24

 In moist meadows. In Clifton ings, and other places near York, frequent. Tadcaster. Thorp Arch. Wetherby. Bramham. Yellow fields, near Richmond. Meadows at Sprotbro', near Doncaster. Terrington. Ganthorpe. Hildenley wood, near Malton. Kirkham Abbey.

A pure white variety is not of unfrequent occurrence.

- 7. C. HEDERACEA. Ivy-leaved Bell-flower. June—September. 24

 In watery places amongst grass. Top of Cob clough, near Ripponden, in the parish of Halifax, in great abundance. Moist meadows near Gargrave. On Sharpah.
- 8. C. PATULA. Spreading Bell-flower. July—August. & On limestone, near Doncaster. Several places near Knaresbro'.

ORDER XL. LOBELIACEÆ.

1. JASIONE.

1. J. MONTANA. Sheep's Scabious. June—July. 24

In dry sandy lanes and on heaths in the hilly parts of the West and North Ridings, frequent.

ORDER XLI. VALERIANEÆ.

1. FEDIA.

- F. DENTATA. Oval-fruited Corn-sallad. June—July.

 In dry fields. At Langwith, near York. Fields at Thorp Arch. Wetherby. Bolton, near Bradford.

2. VALERIANA.

- 1. V. DIOICA. Small Marsh Valerian. June. 4. In moist boggy meadows, frequent.
- V. OFFICINALIS. Great Wild Valerian. June.

 Ω

 On the banks of rivers and in ditches, very common.
- V. Rubra. Red Valerian. June—September.
 \(\mu\)
 On walls at Ganthorpe, near Castle Howard, apparently wild. Or old walls at Helmsley.

ORDER XLII. DIPSACEÆ.

1. DIPSACUS.

D. FULLONUM. Fuller's Teasel. July. S
 Road sides and borders of fields.
 Heliothis dipsacea, (the Marbled Clover,) may be found on this plant.

2. D. SYLVESTRIS. Wild Teasel. July.

Moist hedges and road sides. Saltburn and Redcar. Near Whitby. Near Nun Appleton. Lockington, in the East Riding. Near Skirpenbeck, between Kexby bridge and Wilberfoss, eight miles east of York. Near Hurworth.

3. D. PILOSUS. Small Teasel, or Shepherd's Staff. August—Sep. & In moist shady places. On the Don, below Conisbro'. Woods, near Beverley. (Rocks under Knaresbro' Castle. Burley, between Otley and Skipton. Fountain's Abbey. B. G.) Applegarth, four miles west of Richmond, amongst bushes.

2. SCABIOSA.

1. S. succisa. Devil's-bit Scabious. August—October. 4

In open fields, frequent. In Heslington fields, at the upper part, may be seen a white variety; and at the lower part, which is moist, a double-flowered variety.

The larva of Melitæa Artemis, (the Greasy Fritillary;) Fidonia atomaria, (the Heath Moth;) Sesia Fuciformis, (the Broad-bordered Bee Hawk Moth;) and Euthemonia Russula, (the Clouded Buff Moth;) feeds on this species.

2. S. COLUMBARIA. Small Scabious. June-August. 4

In pastures and waste ground, on dry gravelly soil. On the cliffs, near Scarbro'. On the road between Kilham and Bridlington. On Skelburn moor. Welburn moor. Heslington fields, near York. Near Doncaster. Thorp Arch.

3. S. ARVENSIS. Field Scabious. July. 4

In dry gravelly fields and pastures, frequent. Heslington fields, &c. near York. Near Scarbro'. Newton dale, &c.

ORDER XLIII. COMPOSITÆ.

TRIBE I. CORYMBIFERÆ.

1. EUPATORIUM.

1. E. CANNABINUM. Hemp Agrimony. July—August. 4

In watery boggy places, and on the banks of rivers, not unfrequent,

 β . Banks of the Ouse, opposite Fulford.

Phesia orichalcea, (the Scarce Burnished Brass,) feeds on this plant.

2. CONYZA.

1. C. SQUARROSA. Plowman's Spikenard. July—August. Jon chalk or limestone. On the rocks at Thorp Arch.

3. INULA.

1. I. HELENIUM. Elecampane. July—August. 4

In moist meadows. Amongst the ruins of Rievaulx Abbey. Near Helmsley. Near Growmond bridge, in Esk dale. Mawthorpe dale, Mawthorpe wood, and the pastures adjoining, a mile and a half from Castle Howard. Meadow near Elvington. Field near Overton wood, truly wild.

2. I. DYSENTERICA. Flea-bane. August—September. \mathcal{V}

Hedge banks by road sides, in the vale of York, frequent. Near St. Trinien's, Richmond.

4. ASTER.

1. A. TRIPOLIUM. Sea Star-wort. August—September. 4

On the muddy sea coast. Humber bank, at Hull. Near Hedon. Near Redcar. Near Whitby.

5. ERIGERON.

1. E. ACRE. Blue Flea-bane. July-August. 3

Dry gravelly pastures or waste ground, by road sides. On the Wolds, in many places. In Londesbro' Park. Kippax limekilns. Ledston Lodge. Bramham. On the road from Bransby to Helmsley. On the ruins of St. Agatha's Abbey, Richmond. Malton.

6. SOLIDAGO.

1. S. VIRGAUREA. Golden Rod. July—September. 4

In woods and grassy lanes. A plant thinly scattered throughout the county. Very abundant near Halifax.

Cucullia Asteris, (the Starwort Moth,) feeds upon the flowers; and the Beautiful Lycana Virgaurea, (the Scarce Copper.)

7. GNAPHALIUM.

- G. DIOICUM. Mountain Cudweed. May—July. 24
 On dry heathy waste ground in high situations, frequent.
- 2. G. RECTUM. Upright Cudweed. August. 24
 On sandy heaths and in fields adjoining. Stockton common. Sandy fields, near Kelvington. Near Halifax.
- 3. G. ULIGINOSUM. Marsh Cudweed. August.
 Tilmire, near York, and other places, frequent.
- 4. G. MINIMUM. Least Cudweed. June—September. ①
 On barren sandy heaths and fields, frequent.
- 5. G. GERMANICUM. Common Cudweed. July—September. ©
 Fields and waste ground on dry barren soil, frequent.

6. G. MARGARITACEUM. Pearly Everlasting. August—September. 4. Fields near Skipton, in plenty; but probably not wild.

8. SENECIO.

1. S. VULGARIS. Common Groundsel. March—September. © Very common.

The larva of Agrotis exclamationis, (the Heart and Dart;) Hadena contigua, (the Beautiful Brocade;) Arctia villica, (the Cream-spot Tiger;) Triphæna Pronuba, (the Great Yellow Underwing;) feeds on this species.

- S. viscosus. Stinking Groundsel. August—December. ①
 On waste ground. Near Hood Hall, Thirsk. Cotcliffe wood, on the road between Northallerton and Leak. North Moor lane, near Easingwold. (B. G.) Fields on Stockton common, and in Mr. Copsie's wood, at Earswick, abundant.
- 3. S. LIVIDUS. Green-scaled Groundsel. September—October. ⊙

 On barren heaths and newly-enclosed moorlands. At Thirkleby, near Thirsk. Langwith moor, near York. Near Whitby, very frequent.
- 4. S. SYLVATICUS. Mountain Groundsel. July—August. ⊙

 In sandy heathy places. On Tilmire, near York. At Scoreby and Stamford bridge. Thurtell wood, near Castle Howard. Aislabeck, near Richmond.
- 5. S. JACOBÆA. Ragwort. July—August. 4.
 On waste ground by road sides, frequent.

The larva of Callimorpha Jacobæa, (the Pink Underwing:) and Phragmatobia fuliginosa, (the Ruby Tiger;) feeds on it.

- 6. S. AQUATICUS. Marsh Ragwort. July—August. 24
 Ditches and moist meadows, frequent.
- 7. S. SARACENICUS. Broad-leaved Ragwort. August—September. \mathcal{U} Abundant in the village of Ingleton. At Bierley, near Bradford; probably introduced by the late Dr. Richardson.
- 8. S. TENUIFOLIUS. Hoary-leaved Ragwort.

Near York. Frequent near Settle. Woodhouse moor, near Pocklington. In the lane near St. Trinien's, Richmond. Near Halifax.

9. DORONICUM.

1. D. PARDALIANCHES. Leopard's-bane. May. 4.
Londesbro'. In the woods at Swinton Park.

10. TUSSILAGO.

1. T. FARFARA. Colt's-foot. March—May. 4

In moist stiff clayey soil and on limestone rubbish.

One of our most troublesome weeds on stiff soils; but may be soon eradicated by frequently cutting over with the hoe. The under surface of the leaves scraped off and wrapped in rag dipped in a solution of saltpetre, and dried in the sun, makes the best tinder. The leaves are the basis of the British Herb Tobacco. The larva of Hadena glauca, (the Glaucous Sheers,) feeds on it.

Butter-bur. April. 2. T. PETASITES.

On the banks of rivers and ditches, frequent.

Var. β . (Tussilago hybrida Linn. Sp. pl. 1214,) on the banks of the river Calder, near Halifax, very abundant; and in many other situations in this county.

11. BELLIS.

1. B. PERENNIS. Common Daisy. March—October.

> In pastures and meadows, everywhere. A proliferous variety on Clapham moor.

Miss Kent observes, in her interesting Introduction to Botany, "Who can see or hear the name of the Daisy, the common Field Daisy, without a thousand pleasurable associations! It is connected with the sports of childhood, and with the pleasures of youth. We walk abroad to seek it; yet it is the very emblem of home. It is a favorite with man, woman, and child: it is the robin of flowers."

It has likewise been a distinguished favorite with poets, which it seems well to merit by the beauty and provided in the leaves.

purity of its blossoms.

"'Tis Flora's page: in every place, In every season, fresh and fair, It opens with perennial grace, And blossoms everywhere.

On waste and woodland, rock and plain, Its humble buds unheeded rise, The rose has but a summer's reign, The Daisy never dies."

The use of the petals, which form a ray round these little yellow florets, is to secure them from the effects of inclement weather, until the pollen of the anthers is discharged on the stigmas, so as to prepare seed for future plants; and when this part of the economy of nature is performed, the ray of the Daisy remains expanded.

> "There is a flower, a little flower, With silver crest and golden eye, That welcomes every coming shower, And weathers every sky -

" And thou 'Wee crimson-tipped flower,' Gatherest thy fringed mantle round Thy bosom, at the closing hour, When night-drops bathe the turfy ground."

12. CHRYSANTHEMUM.

1. C. LEUCANTHEMUM. White Ox-eye Daisy. June-July. In fields and way sides, frequent.

Yellow Ox-eye Daisy. June—August. 2. C. SEGETUM.

Wetherby. In corn fields, not frequent. Tadcaster. Thorp Sutton on Derwent. Heslington fields. Buktonholme, near Castle Howard. Several places near Malton and on the Wolds. Very abundant at Brighouse, Lightcliffe, &c. near Halifax.

13. PYRETHRUM.

Feverfew. June—August. 1. P. PARTHENIUM.

> On waste ground and hedge bottoms near farm houses, not common. On the rocks at Clink bank, near Richmond. Sparingly near Settle. On the Bar walls and other places, near York. Amongst the ruins of Bolton Abbey. Near Halifax.

- 2. P. Inodorum. Corn Feverfew. August—September. ①
 In cultivated fields and road sides, frequent.
- 3. P. MARITIMUM. Sea Feverfew. July—August. 4. On the sea coast. Flamborough Head. (B. G.)

14. MATRICARIA.

1. M. CHAMOMILLA. Wild Chamomile. August. ① Heslington fields, &c. near York.

15. ARTEMISIA.

1. A. ABSINTHIUM. Wormwood. 'August—September. 4

Waste ground about villages; not frequent in the county. At Kirby hill, near Boroughbridge. Concepthorpe, near Castle Howard. No. 11 July 1887. Address Addr

Near Helmsley. Fields at Airyholme, near Hovingham. Aldbro'. Overton, Hunsingore, Marston, and many other villages in the country between York and Wetherby. Conisbro', near Doncaster. Armthorpe.

The larva of *Polia dysodea*, (the Ranunculus;) *Cidaria munitata*, (the Rufus Carpet;) *Pterophorus microdactylus*, (the Small Plume;) *Pterophorus tetradactylus*, (the White-shafted Plume;) and *Cucultia Abstraticii*, (the Wormwood;) feeds on this plant.

- 2. A. VULGARIS. Mugwort. August—September. 4.
 On the banks of rivers and in hedges, frequent.
- 3. A. MARITIMA. Sea Wormwood. August—September. 4.

 On the sands at Redcar, abundant. Esk banks, near the toll house, Whitby.

16. TANACETUM.

1. T. VULGARE. Tansy. August—September. 4

On dry banks. Banks of the Ouse, above and below York, abundant. Near Doncaster, between Hexthorpe and Sprotbro' broats.

The larva of *Papilio Machaon*, (the Swallow-tail;) *Cucullia Tanaceti*, (the Tansy;) feeds upon this plant. It likewise affords nourishment to the larva and perfect insect of *Chrisomela fulgida*. This splendid insect may be found on the Tansy, on the banks of the Ouse, in great abundance.

17. ANTHEMIS.

- 1. A. NOBILIS. Chamomile. August—September. 4
 On open commons. On Terrington common. At Lastingham.
- 2. A. ARVENSIS. Corn Chamomile. June—July. ⊙ East Riding, not unfrequent.
- 3. A. COTULA. Stinking Chamomile. June—July. ①
 Heslington fields, &c. near York.

18. ACHILLEA.

1. A. PTARMICA. Sneeze-wort. July—September. 24
On the banks of rivers and ditches, frequent.

2. A. MILLEFOLIUM. Common Yarrow, or Milfoil. June—August. 24

In meadows, pastures, and by road sides, abundant. A beautiful pink or red variety may often be found on the banks of the Ouse.

The larva of Aspilates gilvaria, (the Straw Belle,) feeds on it.

19. BIDENS.

- 1. B. TRIPARTITA. Three-lobed Bur-marigold. August—September. ⊙
 In watery places, frequent. Not found in the parish of Halifax.
- B. CERNUA. Nodding Bur-marigold. September. ⊙
 Ponds at Fulford, near York. In a pond on the west side of Castle
 Howard Park. Bolton beck, near the village.

The radiated var. β . Coreopsis bidens, Linn. Sp. pl. 1281. On Tilmire, near York.

γ. (B. MINIMA.) Near Sesa-pond, Castle Howard Park.

TRIBE II. CYNAROCEPHALÆ.

20. ONOPORDUM.

1. O. ACANTHIUM. Cotton-thistle. July—August. & Woods and waste grounds. Near Castle Howard, frequent.

21. CNICUS.

- 1. C. LANCEOLATUS. Spear Plume-thistle. June—September. & In waste ground, very common.
- 2. C. PALUSTRIS. Marsh Plume-thistle. July—August. & Buttercrambe moor, near York.
- 3. C. Arvensis. Creeping Plume-thistle. July. 4
 In cultivated fields and by way sides, very frequent.
- 4. C. ERIOPHORUS. Woolly-headed Plume-thistle. August. & On limestone. Wetherby. Thorp Arch. From Market Weighton to Londesbro'. Near Copgrove. Pastures near Ripon. Near Sand Hutton. Helmsley.
- 5. C. HETEROPHYLLUS. Melancholy Plume-thistle. July—August. 24

 In moist mountain pastures. Banks of the Tees in several places, and near the High force, abundantly. In a small wood near Giggleswick Tarn. Skirrith wood, near Ingleton. Near Askrigg, Wensleydale. Banks of the Greta, above Greta bridge. In a meadow near the New bridge, Downholme. Near Hawes, Wensleydale. Newton dale, seven miles north of Pickering. At Dean-Head, in Barkisland, and other places, near Halifax.

6. C. PRATENSIS. Meadow Plume-thistle. June-July. 24

In wet shady places. In Wheldrake lane, Buttercrambe moor, Askham bogs and Stockton, all near York. Near Hull. Between Goole and Thorne.

22. CARLINA.

1. C. vulgaris. Carline-thistle. June. 3

On dry sandy pastures. Coneysthorpe banks, and other places, near Castle Howard. Thorp Arch. Near Sherburn. Banks of the Tees. North cliff, Scarbro'. Several places on the Wolds, and near Beverley. Whiteliffe scarr. Banks of the Ure, at Wensley. Near Tadcaster. Ganthorpe moor. In a field at Upper foot, in Midgley, and fields at Norland moor, near Halifax. At Cawcliffe, near Huddersfield. At Thursting bridge, on the road from Widdop to Colne. Rievaulx.

23. ARCTIUM.

1. A. LAPPA. Burdock, or Clot-bur. July—August. 3
In waste ground by way sides, frequent.

Var. \(\beta\). A. BARDANA. Woolly-headed Burdock. Heslington fields, and other places, near York.

The larva of Polia Chi, (the July Chi;) Hepialus Humuli, (the Ghost;) Lælia cænosa; and Gortyna flavago, (the Frosted Orange,) feeds upon the pith.

24. SERRATULA.

1. S. TINCTORIA. Saw-wort. July-August. 4

In thickets and grassy pastures. Askham bogs, near York. On both sides of the Tees, at Winch bridge. Pastures near Ganthorpe, and in the Head hagg, adjoining Castle Howard Park. Road side, between Kirkby Lonsdale and Ingleton. West field, near Richmond.

25. CENTAUREA.

- 1. C. NIGRA. Black Knapweed, Hard-heads. June—August. 24
 In pastures and by road sides, very common.
- 2. C. CALCITRAPA. Common Star-thistle. July—August. ⊙
 Sandy places near the sea. Sandsend, near Whitby.
- 3. C. CYANUS. Blue-bottle. July—August. ⊙
 In corn fields, frequent.
- C. SCABIOSA. Greater Knapweed. July—August.

 In the borders of corn fields and by way sides, on dry gravelly soil, in the East and North Ridings, not unfrequent. With white flowers, in Heslington fields. Thorp Arch.

The larva of Orthosia Pistacina, (the Veiny Chesnut,) may sometimes be found on this species.

C. JACEA. Brown Radiant Knapweed. August—September.

Near the mausoleum, Castle Howard; and in a field near Ganthorpe. Plantation on the north side of Terrington carr.

26. CARDUUS.

- 1. C. NUTANS. Musk Thistle. July—August.

 In waste ground and dry barren pastures. In the moat at York.
 Ganthorpe. Newton dale, seven miles north of Pickering.
- 2. C. ACANTHOIDES. Welted Thistle. June—July.
 Way sides, frequent.
- 3. C. TENUIFLORUS. Slender-flowered Thistle. June—July.
 O
 Near Redcar. Near Whitby, frequent.
- C. MARIANUS. Milk Thistle. July. A
 Near Acomb, &c. near York. Runswick, eight miles north west of Whitby. Ellershaw hill, near Ripon. Near Rillington. Near Boroughbridge.
- 5. C. ERIOPHORUS. Woolly-headed Plume Thistle. August. & Hackness, near Scarbro'. Norton, near Malton, frequent.

TRIBE III. CICHORACEÆ.

27. SONCHUS.

1. S. ARVENSIS. Corn Sow-thistle. August. 4

ground.

The beautiful parasitic $Uredo\ Sonchi$ is found on the stalks and leaves of both the species; at first bright scarlet, afterwards orange,

S. OLERACEUS. Common Sow-thistle. July—September. ⊙
 α and β. Both of frequent occurrence in cultivated as well as in waste

The larva of Cucullia Umbratica, (the Large Pale Shark;) Cucullia lucifuga, (the Large Dark Shark;) and Actebia præcoz, (the Portland;) feeds on this plant.

28. LACTUCA.

L. VIROSA. Strong-scented Lettuce. August—September. J
 Old walls and rough borders of fields. Near the road between
 York and Shipton. On rocks at Thorp Arch. On rocks at Knares bro'. On the walls of Kirkham Abbey. Walkington, near Beverley.
 On the castle walls, Richmond. Mulgrave woods, near Whitby.

The larva of Arctia Caja, (the Great Tiger Moth;) Calocampa exoleta, (the Sword Grass;) Mamestra Suasa, (the Dog's Tooth;) Euplexia lucipara, (the Small Angleshades;) Polia flavocincta, (the Large Ranunculus;) Polia dysodea, (the Ranunculus;) and Mormo maura, (the Old Lady;) feeds on it.

29. PRENANTHES.

1. P. MURALIS. Wall Lettuce. July. 4.
On old walls and in stony woods, frequent.

30. LAPSANA.

L. COMMUNIS. Nipple-wort. June—July. ⊙
 In waste and cultivated ground, frequent.

The larva of Cucullia Lactuca, (the Lettuce Shark,) feeds upon this plant.

31. LEONTODON.

1. L. TARAXACUM. Dandelion. April—August. 24
Common everywhere.

The larva of Acontia Solaris, (the Black Kidney;) Polia advena, (the Pale Shining Brown;) Dasychira fascelina, (the Dark Tussock;) Graphiphora tristigma. Caradrina ambigua, (the Dotted Rustic;) Glæa polita, (the Netted Chesnut;) Hadena plebæa, (the Shrew;) Polia occulta, (the Great Brocade;) feeds upon this plant.

2. L. PALUSTRE. Marsh Dandelion. June—August. 4

In low marshy ground. Tilmire, near York. In the marshy meadows, near Beverley. On the common at Ripon. Marshes, near Copgrove.

32. CREPIS.

- 1. C. TECTORUM. Smooth Succory Hawkweed. June—September. ①
 On old walls and dry banks. On the city walls, and other places, near York.
- C. BIENNIS. Rough Hawk's-beard. June—July. On the Wolds, west of Bishop Burton, and about Cherry Burton.
 On the road from Driffield to Paineslack.

33. PICRIS.

1. P. Echioides. Bristly Ox-tongue. June-July. ⊙

Near Thorp Arch, sparingly. Sides of ditches, near Beverley. Near Huggate, on the Wolds. Whitsuncliffe, near Thirsk. Ruswarpe banks, eight miles north west of Whitby.

34. HIERACIUM.

- 1. H. PILOSELLA. Common Mouse-ear Hawkweed. May—August. 4
 On banks, walls and cottage roofs, frequent.
- 2. H. MURORUM. Broad-leaved Wall Hawkweed. June. 4
 On old walls and rocks. On Knaresbro' Castle. Bolton Abbey.
 Egglestone Abbey, near Barnard Castle. Clink bank, on the White
 Dog, near Richmond. Walls at York.
- 3. H. SYLVATICUM. Wood Hawkweed. June—August. 24
 On old dry walls at York. Castle Howard. Richmond. From Wilton
 to Thorp Arch. Iburn dale, four miles south of Whitby. Near
 Halifax.

4. H. Paludosum. Succory-leaved Hawkweed. July. 4

In wet shady places. Rough Hills plantation, two miles from Castle Howard. In Craven, frequent. Near Ripon. Woods at Studley. Hardraw force, in Wensleydale. Aske wood and West field, near Richmond. Plantations around Terrington carr and Mawthorpe dale. Settle, very common. Iburn dale, near Whitby. Ogden clough, Turner clough, Shibden dale, &c. near Halifax, very frequent.

5. H. VILLOSUM. Alpine Hawkweed. August. 2

Rocks near Meer gill, at the foot of Ingleborough. (E. F.) Rocks in Castle Howard woods. (Mr. Spruce, Ganthorpe.) Arncliffe wood, near Whitby. (Belcher's Scenery of the Whitby and Pickering Railway.)

H. SABAUDUM. Shrubby Broad-leaved Hawkweed. Aug—Sep. 24
 In rough lanes. Langwith lane, Stockton forest and Hob moor, near York. Near Richmond. Coneysthorpe banks. Near Halifax, very abundant.

7. H. UMBELLATUM. Narrow-leaved Hawkweed. August—September. 24

In shady situations amongst ling on Stockton forest. In an old stone quarry called Blind Pit, at Hutton, near Ripon. Amongst furze bushes on Knavesmire, near York.

The larva of Polia serena, (the Broad-barred White,) feeds on the plant.

- 8. H. MACULATUM. Stained-leaved Hawkweed. June—September. 4
 Winstone cragg, Teesdale. Helks wood, near Ingleton.
- 9. H. LAWSONI. Glaucous Hairy Hawkweed. July. 4

On rocks by Maze beck, and at Maze beck scarrs. On Gordale scarrs, Craven. $(E.\ F.)$

The Hawkweeds, though scattered in tolerable abundance, afford food to very few insects. *Hipparchia Sithonus*, (the Gate Keeper;) *Anthrocera Filipendula*, (the Six-spot Burnett;) and *Polia serena*, (the Broad-barred White;) may be found upon some of the species.

35. HYPOCHÆRIS.

1. H. MACULATA. Spotted Cat's-ear. July. 4

Open high pastures. Near Malham cove. Near Attermine cove, Settle. (B. G.)

H. GLABRA. Smooth Cat's-ear. June—August. ⊙
 Common near York, and frequently forming a golden show in bad
grass-plots.

3. H. RADICATA. Long-rooted Cat's-ear. July—August. 4

In pastures and waste ground.

The larva of Cerigo texta, (the Straw-coloured Underwing;) Pyrophila Tragopogonis, (the Mouse;) feeds on this species.

36. TRAGOPOGON.

1. T. PRATENSIS. Yellow Goat's-beard. May—June. & Meadows and pastures.

Called in this neighbourhood the Shepherd's Clock; it closes its flowers about mid-day.

"In ev'ry copse and shelter'd dell,
Unveil'd to the observant eye,
Are faithful monitors, who tell
How pass the hours and seasons by.
Broad o'er its imbricated cup
The GOAT'S-BEARD Spreads its golden rays,
But shuts its cautious petals up,
Retreating from the noontide blaze."

- 2. T. MAJOR. Greater Goat's-beard. June—July. & Neighbourhood of Settle, frequent. (Mr. John Tatham, jun.)
- 3. T. Porrifolius. Purple Goat's-beard. May—June. & Near Pickering.

37. APARGIA.

- 1. A. HIRTA. Deficient Hawkbit. July—August. 24
 On sandy heaths. Stockton forest, and other dry pastures, &c. near
 York, abundant.
- 2. A. AUTUMNALIS. Autumnal Hawkbit. August. 4 Meadows, &c. frequent.

38. CICHORIUM.

1. C. INTYBUS. Wild Succory. July—September. 4
On dry gravelly soil near York, frequent. Sheriff Hutton. Malton.
Barton heights. From Skeeby to the High street, Richmond.

ORDER XLIV. BORAGINEÆ.

1. ECHIUM.

1. E. VULGARE. Viper's-bugloss. June—August. &
On old walls and rubbish, and in dry gravelly fields. Walls of
York. Heslington fields. On the Wolds, frequent. Scarr hill,
Bolton Abbey, &c. Richmond. Thorp Arch. Kirkham Abbey.
Hildenley stone quarry. Pickering Castle. Sheffield. Bradford,
&c. &c.

2. PULMONARIA.

1. P. OFFICINALIS. Common-Lungwort. April—May. 24
Plentiful in the woods at Londesbro', near Market Weighton.

3. LITHOSPERMUM.

1. L. OFFICINALE. Gromwell, or Grey Millet. May. 4

Dry gravelly situations and amongst ruins. Frequent at Dunnington, near York. About twenty yards from the Abbey gate leading to Knaresbro'. Near Kirkstall Abbey. Near Selby. Near Catton. Near Conisbro'. Oxclose wood, near Kirkham. Near Oswaldkirk. St. Agatha's Abbey, Eastby, near Richmond. Near Tadcaster. On the rocks above Cave Hole wood, near Settle. Thorp Arch. Selby.

2. L. ARVENSE. Bastard Alkanet. Stonyhard, Corn Gromwell.

May—June. ⊙

In corn fields and waste ground. Heslington fields, near York. Thorp Arch. Bramham. Wetherby. Redcar. Sheffield. Doncaster.

4. SYMPHYTUM.

1. S. OFFICINALE. Comfrey. May-June. 4

About the banks of rivers and ditches. Ditches near the Ouse and Foss, at York. Near Knottingley. Banks of the Derwent, near Kexby bridge.

2. S. TUBEROSUM. Tuberous-rooted Comfrey. July. 4

In moist places. In the road between Settle and Anley House; also in various places on the banks of the Ribble, near Settle, on lime-stone.

5. BORAGO.

1. B. OFFICINALIS. Common Borage. June-July. 3

On waste ground. Near York. Near Bridlington Quay. On some waste ground by the road side between Giggleswick and the Tarn, on sandstone; the only habitat in the neighbourhood. Corn fields near Terrington. Woodlands, near Whitby.

6. LYCOPSIS.

1. L. ARVENSIS. Small Bugloss. June—August. ⊙

On waste ground and dry banks. Near York, sparingly. Near Richmond. Near Redcar.

7. ANCHUSA.

1. A. SEMPERVIRENS. Evergreen Alkanet. May-June. 4

In waste ground and by road sides. At Littlebank, two miles west of Settle, on sandstone. In several places in the village of Wharfe, four miles north of Settle, on limestone. In the village of Giggleswick, and at Lawkland, on sandstone. Londesbro', East Riding. In several situations near Halifax, but not truly wild.

8. MYOSOTIS.

- 1. M. PALUSTRIS. Great Water Scorpion-grass. June—September. 4
 In running ditches and by river banks, frequent.
- 2. M. CÆSPITOSA. Tufted Water Scorpion-grass. May—June. 4
 In watery places. Pond at St. Trinien's, near Richmond. Holdgate,
 Dringhouses, banks of the Foss, &c. near York.
- 3. M. INTERMEDIA. Trailing Hairy Scorpion-grass. April—May. 4

 In corn fields and shady places, near York. (Mr. J. Backhouse.)
 In Mawthorpe dale, abundant.
- 5. M. ARVENSIS. Field Scorpion-grass. June—August. ⊙
 In dry sandy fields and road sides, frequent.
- 6. M. Versicolor. Yellow and Blue Scorpion-grass. April—June. ⊙
 On old walls and dry sandy banks, frequent.
- M. COLLINA. Early Field Scorpion-grass. April—May.

 Sandy hedge banks about Sandal and Armthorpe, near Doncaster.
 Near York.

The larva of Deiopeia pulchella, (the Crimson Speckled,) feeds on the species.

9. CYNOGLOSSUM.

1. C. officinale. Hound's-tongue. June—July.

On waste ground and by road sides. Several places in Leeming lane, and from Catterick bridge to Richmond. Thornton le Clay. Near Plumpton. Conisbro' Castle. Road side between Boroughbridge and Ripon. Between Hayton and Shipton, near Market Weighton.

The larva of Hypercompa Dominula, (the Scarlet Tiger;) Euthemonia Russula, (the Clouded Buff;) and Nænia typica, (the Gothic;) feeds on it.

ORDER XLV. CONVOLVULACEÆ.

1. CONVOLVULUS.

C. ARVENSIS. Small Bindweed. June—September.

On dry banks, road sides and gravelly fields, frequent.

The larva of Sphinx Convolvuli, (the Convolvulus Hawk;) Erastria sulphurea, (the Spotted Sulphur;) and Caradrina sepii, (the Mottled Rustic;) feeds on this plant.

2. C. SEPIUM. Great Bindweed. July—August. & Moist hedges and woods, frequent.

2. CUSCUTA.

- 1. C. EUROPÆA. Greater Dodder. July—September. ⊙
 On nettles and thistles. In the corn fields, near Malton.
- 2. C. EPITHYMUM. Lesser Dodder. June—September. 4

 On common heath. On the foot road from Mr. Hustler's house to
 Thorps wood, on Stockton forest. In a field between Redcar and
 Kirkleatham, through which the foot road passes.

ORDER XLVI. POLEMONIACEÆ.

1. POLEMONIUM.

1. P. CERULEUM. Jacob's Ladder. June. 4

At Malham cove. Gordale scarr, and in the high open pastures between Malham and the calamine pits; also between Arncliffe and Kilnsey, under the limestone cliffs on the west side of the valley; all those habitats on limestone. Arncliffe wood, near Mount Grace.

ORDER XLVII. PLANTAGINEÆ.

1. PLANTAGO.

- 1. P. MAJOR. Greater Plantain. April—September. 24 Frequent everywhere.
- 2. P. MEDIA. Hoary Plantain. June—August. 24
 In the vale of York, abundant.
- 3. P. LANCEOLATA. Ribwort Rib-grass. June—July. 1/2
 In meadows and pastures, very common.
- 4. P. MARITIMA. Sea Plantain. July—September. μ

On the sea coast, large rivers and mountain streams. Scarbro'. Filey bridge. Coatham, at the mouth of the Tees; and at the High force. Carr-end, Wensleydale. In the road side between Arncliffe and Kilnsey, thirty-eight miles from the coast. On the margin of the river, Hull.

P. CORONOPUS. Buck's-horn Plantain. June—August. O
 At Coatham. On Filey bridge. On the Wolds. From New Village to South Cave, on the road side. Road side leading from Doncaster to Armthorpe.

A number of fine insects feed upon the different species of Plantain; amongst them Pamphila Paniseus, (the Chequered Skipper;) Euthemonia Russula, (the Clouded Buff;) Nemeophila Plantaginis, (the Wood Tiger;) Phragmatobia fuliginosa, (the Ruby Tiger;) Eulepia grammica, (the Feathered Footman;) Graphiphora erythrocephala, (the Barred Chesnut;) Mythimna grisea, (the Bright-eyed Clay;) Mythimna Lithargyria. Grammesia tritinea, (the Equal Treble-lines;) Caradrina ambigua, (the Dorded Rustic;) Caradrina Alsines, (the Garden Rustic;) Mamsetra Susac, (the Dorg's Tooth;) Xanthia flavago, (the Pink-barred Sallow;) and Cidaria quadrifasciaria, (the Large Twin-spot.)

2. LITTORELLA.

1. L. LACUSTRIS. Plantain Shore-weed. June-July. 4

In ditches and watery places. On Stockton and Strensall commons, and at Buttercrambe, all near York. Spacliff, Scarbro', and in the Mere. Black moor, near Leeds. Downholme moor.

ORDER XLVIII. PLUMBAGINEÆ.

1. STATICE.

- 1. S. ARMERIA. Common Thrift. Sea Gilliflower. July—August. 24

 On the muddy sea shore, as well as on the loftiest mountains. In the marshes at Coatham. On the banks of a rivulet between Carperby and Askrigg. Likewise near Nappa, in Wensleydale. At Inkersley gill, near Stockdale, three miles east of Settle, near the summit of the hill where the water runs to the east and west sea, on sandstone. Esk banks, near Whitby.
- 2. S. LIMONIUM. Sea Lavender. July—August. \mathcal{U} On muddy shores, near the mouths of large rivers. In the marshes at Coatham, near the mouth of the Tees. Esk banks, near Whitby.

ORDER XLIX. OLEINEÆ.

1. LIGUSTRUM.

1. L. VULGARE. Privet. May—June. In hedges, not frequent.

The larva of Sphinz Ligustri, (the Privet Hawk;) Acronycta Ligustri, (the Dark Coronet;) and Petasia Cassina, (the Sprawler;) feeds on the Privet.

2. FRAXINUS.

1. F. EXCELSIOR. The Ash. April-May. Tree.

In woods and hedges.

Ips quadripustulata and quadripunctata, may be found on the stumps the summer following the felling of the trees. The larva of Dorcus parallelipipedus, Sinodendron cylindricum, and Apion vorax, may be found helping forward the decay of old Ash Trees. The larvæ of the following lepidoptera feed on the follage:—Lasiocampa Quercus, (the Great Egger;) Hypercompa Dominula, (the Scarlet Tiger;) Lithosia complena, (the Footman;) and Apetala Aceris, (the Sycamore Tussock.)

ORDER L. ERICEÆ.

1. ANDROMEDA.

1. A. POLIFOLIA. Marsh Andromeda, or Wild Rosemary. June—July. Don mossy peat bogs. On the moors above Ogden Kirk, and on Rishworth moor, near Halifax. On the moors, near Todmorden. Above Thornton, in Bradford dale. On Thorn moor. On the Helleth moss, six miles north of Settle. Black moor, near Leeds.

2. CALLUNA.

1. C. VULCARIS. Common Ling. June—July. 12
Frequent on moors.

With white flowers on Tilmire, near York.

"Flower of the wild! whose purple glow Adorns the dusky mountain's side, Not the gay hues of Iris' bow, Nor garden's artful, varied pride, With all its wealth of sweets could cheer, Like thee, the hardy mountaineer.

Flower of his heart! thy fragrance mild, Of peace and freedom seems to breathe; To pluck thy blossom in the wild, And deck his bonnet with the wreath, Where dwelt of old his rustic sires, Is all his simple wish requires.

Flower of his dear-loved, native land! Alas! when distant, far more dear! When he from some cold foreign strand Looks homeward through the blinding tear, How must his aching heart deplore That home and thee he sees no more!"

Saturnia Pavonia-minor, (the Emperor;) Anarta Myrtilla, (the Beautiful Yellow Underwing;) Scotophila porphyrea, (the True Lover's Knot;) may be found on Heath on Stockton forest. It likewise furnishes food to Acromycta auricoma, (the Scarce Dagger.)

3. ERICA.

- 1. E. TETRALIX. Cross-leaved Heath. July—August. 5.
- 2. E. CINEREA. Fine-leaved Heath. July—October. 5
 On dry turfy heaths and banks.
 White varieties of both the species not unfrequent.

4. ARBUTUS.

1. A. uva ursi. Red Bear Berry. June. b

On barren rocks. Hutchin moor, near Todmorden. On Cronkley scarr and on Falcon Clints scarr, on the opposite side of the Tees above Middleton. It formerly grew in the Eavs at Heptonstall, but is now eradicated.

ORDER LI. PYROLEÆ.

1. PYROLA.

P. ROTUNDIFOLIA. Round-leaved Winter-green. July—August. 24
 In dry heathy woods. North side of Seamer moor, near Scarbro'.

2. P. MEDIA. Intermediate Winter-green. July-August. 4

In woods. In Crompton cover, four miles north of York. In Ganthorpe Broats plantation, near Castle Howard. In the Collier hage, near Helmsley. Mulgrave woods, near Whitby. Woods near Halifax, Heptonstall, Todmorden, &c.

This interesting plant has been observed in Crompton's cover for the last ten years. In 1834, the flowers were in thousands; in 1835, abundance of leaves made their appearance, but not a flower was to be found; and in 1836, not above two or three plants were to be found: thus shewing the uncertainty of habitats. Tolerably plentiful in 1837.

3. P. MINOR. Lesser Winter-green. August. 4

In woods. In the woods at Castle Howard, frequent. East side of the race-ground, near Scarbro'. Cotherstone banks, four miles north west of Barnard Castle. Aske wood and Black plantation, near Richmond. In the woods about Malham and Clapham. Whitsuncliffe wood, near Thirsk. Ellington wood, near Doncaster. North Dean wood, near Halifax. Near Todmorden, Heptonstall, &c.

2. MONOTROPA.

1. M. HYPOPITHYS. Yellow Bird's-nest. June-July. 24

About the roots of beeches, in woods. In a wood, formerly a stone quarry at Jack Daw cragg, two miles west of Tadcaster. In the woods at Bramham Park. In the woods at Boynton, near Bridlington.

ORDER LII. APOCYNEÆ.

1. VINCA.

1. V. MINOR. Lesser Periwinkle. May-June. 2

On dry hedge banks. Near Roche Abbey. On the road through Thornaby, on the right hand side towards Thirsk. Near Hebden bridge. Woods, near Elvington. Brandsby dale. Londesbro'. Near Kirkham Abbey. Belmont wood, near Knaresbro'. Near Halifax.

2. V. MAJOR. Greater Periwinkle. May-June. 24

Woods and bank sides. Oswaldkirk woods. Near Londesbro'. Banks of the Wharfe, near Wetherby. Road side at Loversall, near Doncaster; probably the outcast of a garden.

ORDER LIII. GENTIANEÆ.

1. ERYTHRÆA.

1. E. CENTAURIUM. Centuary. July—August. ©
Dry gravelly pastures, frequent.

2. GENTIANA.

Marsh Gentian. August. 1. G. PNEUMONANTHE.

On dry barren sandy moors, as well as on moist peaty bogs. On Tilmire, two miles east of York. Likewise in Wheldrake lane, as well as on Stockton forest, and most other moors near York. Ross and Spalding moors. Everingham, Melbourne, and other places, near Pocklington. Pill moor. Terrington carr. Catton and Elmire woods, near Thirsk. Potteric carr, near Doncaster.

A plant well worthy the attention of the gardener; it will grow in pots or damp borders in a mixture of loam and sandy peat. I cultivate specimens of a pure white variety, from two or three localities near York.

Spring Gentian. 2. G. VERNA. May.

In mountainous situations above Middleton, in Teesdale; and on the south east part of Cronkley fell, on the Yorkshire side of the Tees.

This little plant, one of the most beautiful of Flora's gems, will grow well in pots or the open border, if planted in a mixture of fresh hazel loam and pebbles, even in the smoke of a city.

On the Durham side of the Tees, thousands of acres are studded with its bright blue flowers. No district of the same extent in the kingdom, will reward the Botanist with so rich an harvest as Teesdale. Beginning at Greta bridge, you pass through an avenue of lofty elms to Rokeby Park, the seat of J. B. S. Morritt, Esq. In the park are many rare plants, with which Mr. Smythis, the gardener, is well acquainted, and is at all times ready to point them out to strangers visiting this beautiful place. The walk from Rokeby to Barnard Castle, by Egglestone Abbey, is interesting to the Botanist; he may find Ribes petræum, Geranum lucidum, Gagea lutea, Adoxa Moschatellina, Lathræa squamaria, Galeobdolon luteum, &c. &c. From Barnard Castle to Middleton, in a beautiful walk of ten miles, you pass through Lartington, the residence of Henry J. M. Witham, Esq., author of the Internal Structure of Fossil Vegetables, who possesses a most interesting Museum, fitted up in a superior manner, for every department of Natural History; a little way further you come to Cotherstone, near which, at the junction of the Tees and the Boulder, grows the rare Saxifraga Hirculus, Gagea lutea, Myrrhis odorata, Saxifraga aizoides, S. granulata, &c. &c. From Middleton to Winch bridge, where a chain bridge crosses the Tees, on the rocks that here confine the impetuous river, the Botanist will find the Potentila laptestris, Pyrus Aria, Prunus Padus, Thlaspi alpestre, Serratula tinctoria, Equisctum variegatum, Polygonum viviparum; and the ground studded with flowers of Trollius europsus, Potentilla fruticosa, Vola palustris, Primula farinosa, Rubus saxatilis, &c. &c. From Winch bridge to High force, one mile. Here is a very comfortable public-house, which has now accommodation for carriages and horses, kept va person of the name of Thomas Scott, who is well acq

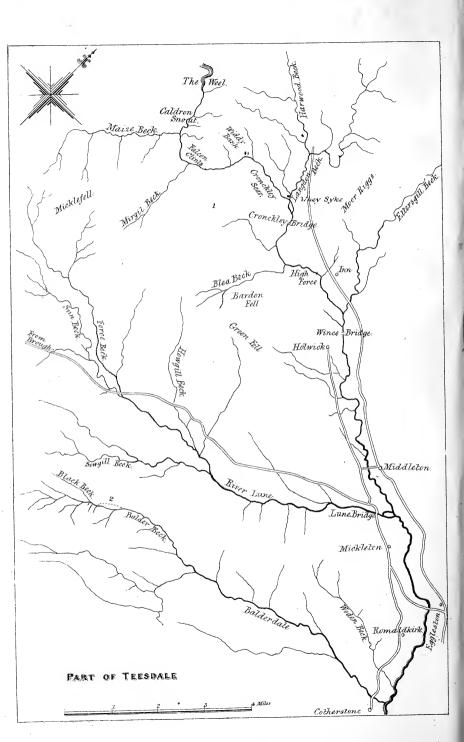
Autumnal Gentian. August—September. 3. G. AMARELLA.

On chalk and limestone hills, as well as on low peaty moors. On Stockton forest, Wheldrake moor, and several other places near York. Huddlestone stone quarry, near Sherburn. Temple hill, in Worsley Park. Garraby hill, and on the Wolds, frequent. Race-course, near Richmond. Bramham moor. Thorp Arch. Conisbro'. Limekilns at Kippax. On the road from Brandsby to Helmsley; a white variety grows on the top of the hill above Brandsby. Near Halifax.

4. G. CAMPESTRIS. Field Gentian. September—October.

Grows with the preceding. Stockton forest, near York. Helmsley. Road between Barmston and Lipsett. Whitcliffe scarr, near Richmond. Near Hebden bridge. Terrington carr. Marske common, near Redcar. Near Wixley. Near Bingley. Near Horsforth. Occasionally in old fields, near Halifax.





3. CHLORA.

1. C. PERFOLIATA. Yellow-wort. August—October. O

Confined to the chalk and magnesian limestone in old quarries and barren hills. Thorp Arch. Near Bramham, frequent. Between Sherburn and Abberford. Broadsworth, near Doncaster. Kippax. Wetherby. On the Wolds, very frequent.

4. MENYANTHES.

1. M. TRIFOLIATA. Common Buckbean. June—July. 4

In watery meadows and spongy boggy ground, frequent.

Acronycta Menyanthedis, is found upon this plant.

2. M. NYMPHÆOIDES. Fringed Water-lily. July—August. 4. (VILLARSIA NYMPHÆOIDES. Vent.)

In the lake at Castle Howard; introduced by the late Mr. Teesdale.

ORDER LIV. SOLANEÆ.

1. HYOSCYAMUS.

1, H. NIGER. Henbane. July-August. @

Waste ground and road sides. Several places near York, sparingly. Near Bridlington. Helmsley. Redcar and Coatham. Thorp Arch. Boroughbridge. Kirkby hill. Appleton-le-Street, near Malton. Wass, near Black Hambleton. Between Pocklington New Inn and Hayton. Knaresbro'.

 ${\it Corizus~Hyoscyami},~({\it a species~of~Wood~Bug},)~{\it and~the~larva~of~Euclidia~glyphica},~({\it the~Burnet},)~{\it is~found~upon~the~plant}.$

2. VERBASCUM.

1. V. THAPSUS. The Great Mullein. July—August. &

On bank sides and old walls, not unfrequent.

The larvæ of the following moths feed upon it:—Cucullia Scrophulariæ, (the Water Betony;) C. Verbasci, (the Mullein;) Polia bimaculosa, (the Grey Arches;) and Gortyna flavago, (the Frosted Orange.)

2. V. BLATTARIA. Moth Mullein. July. O

On dry banks. Near Green Hammerton, on the road to York.

3. SOLANUM.

1. S. DULCAMARA. Bitter-sweet. June-August. b

In hedges and thickets in damp situations, not uncommon.

With white flowers at Layerthorpe, near York.

2. S. NIGRUM. Black Nightshade. June—September. 2

On waste and cultivated ground, not common. On the road from York to Escrick. Near Tadcaster. On the road from New Village to South Cave. Near Catterick bridge. Acomb, near York.

4. ATROPA.

1. A. BELLADONNA. Deadly Night-shade. June—July. 21

On the limestone rocks at Jack Daw cragg, near Thorp Arch. Barrow cliff, Scarbro'. Bramham moor. On a rock near Fountain's Abbey. In the road between Abberford and Becca Lodge. At the smelt mill, near West Burton in Bishopdale. Marr church yard, and Askern, near Doncaster. Pierce bridge. Near the Abbey House, Knaresbro'.

The whole plant is poisonous; against which, if promptly administered, a glass of warm vinegar, and exercise to prevent sleep, are the best remedies, where the use of the stomach-pump cannot be quickly obtained.

The larva of Graphiphora baja, (the Dotted Clav.) feeds on this species.

ORDER LV. PRIMULACEÆ.

1. CENTUNCULUS.

1. C. MINIMUS. Chaff-weed. June—September. ©

Mostly in cart ruts on barren heaths. In a sand hole on the Scarbro' road, four miles and a half from York. On Stockton common. On a common on the road from Spalding to the hanging bridge on the Market Weighton canal. On Houghton moor, near Newbald.

2. GLAUX.

1. G. MARITIMA. Black Saltwort. June-August. 21

On the banks of muddy rivers open to the tide, and in salt marshes. On the banks of the Humber. Mouth of the Tees, and banks of the salt water ditches at Coatham. Esk banks, near Whitby.

3. PRIMULA.

1. P. VULGARIS. The Primrose. April-May. 4

In woods and on hedge banks, frequent.

Few flowers are connected with more agreeable associations than this early favorite of our youth.

"the meek
And soft-eyed PRIMROSE."

"How sweet thy modest unaffected pride Glows on the sunny bank and woods warm side: And where thy fairy flowers in groups are found The school-boy roams enchantedly along; Plucking the fairest with a rude delight, While the meek shepherd stops his simple song To gaze a moment on the pleasing sight; O'erjoy'd to see the flowers that truly bring The welcome news of sweet returning spring."

The larvæ of several beautiful moths feed upon the different species; amongst others—*Triphæna Pronuba*, (the Great Yellow Underwing;) *Triphæna fimbria*, (the Broad-bordered Yellow Underwing;) *Graphiphora festiva*, (the Ingrailed Clay*) and *Cidaria montanata*, (the Silver-ground.)

2. P. ELATIOR. The Oxlip. April—May. 4

In open woods and road sides on clayey soil. Woods near Tadcaster. Several places on the road from Askham to Thorp Arch. Oxclose wood, three miles from Castle Howard. Mawthorpe dale. Round Howe, near Richmond. Very common in the limeston woods, near Settle. In the woods at Whitsuncliffe, near Thirsk. Eslington wood, near Doncaster. Roche Abbey. Cliffs, at Whitby.

 $P.\$ elatior grows in Heslington wood with scapes bearing umbellate, and also solitary flowers, showing its affinity to $P.\$ vulgaris.

3. P. VERIS. The Cowslip. April—May. 24
In meadows and pastures, frequent.

P. elatior and P. veris, have both been produced from the seed of P. vulgaris.-Professor Henslow.

4. P. FARINOSA. Bird's-eye Primrose. May-July. 4

In dry as well as moist meadows and pastures. At Huby, and near the mill between Sutton and Stillington, near York. Near Dishforth. Cleaves, near Thirsk. Londesbro'. Very abundant in Craven, and in Teesdale, varying from the purest white flowers to the deepest crimson. Gilling, near Helmsley. Hipswell Lodge, near Richmond. Wensleydale, abundant.

4. LYSIMACHIA.

1. L. VULGARIS. Great Yellow Loosestrife. June—August. 4

On the sides of ditches and on river banks. Langwith, Askham bogs, Heslington fields, and other places near York. Banks of the Derwent.

2. L. THYRSIFLORA. Tufted Loosestrife. June-July. 2

In wet ditches. In a ditch at Leckby carr, near Boroughbridge, in abundance. Formerly found at the foot of Severus's hill, near York, by Dr. White. Gormire pool, near the road leading from Helmsley to Thirsk.

- 3. L. NEMORUM. Wood Loosestrife. May—September. 21
 In moist woods and shady places.

5. HOTTONIA.

1. H. PALUSTRIS. Water Violet. Water Yarrow. June. 4

In ditches and ponds with muddy bottoms. Frequent in the vale of York. Slingsby carr. Ponds between Marston and Wetherby. Kirkham. Wheldrake. Elvington. Beverley. Potteric carr, Doncaster. Knaresbro'.

6. ANAGALLIS.

1. A. ARVENSIS. Scarlet Pimpernel. May—September.

In fields and waste ground, frequent.

2. A. CÆRULEA. Blue Pimpernel. July. ⊙

In corn fields. Fields near Malton. Near Rotherham. (Mag. Nat. Hist.)

I have for several years cultivated a beautiful pink variety of this species, from seeds found originally near Bramham.

3. A. TENELLA. Bog Pimpernel. July—September. 4

In wet spongy bogs. Stockton forest, Langwith, and other places near York. Barlby moor. Skipwith common. Bramham moor. Greenhill, near Bingley. Above the wells at Ilkley. Stainland Dean, near Halifax. Terrington carr. Cottingham. Druggen hill, near Scotton. Knaresbro'.

May be cultivated either in a large pot standing in a pan of water, or the shady part of a damp border; in August it will be covered with beautiful pink flowers.

"Of fairer form and brighter hue Than many a flower that drinks the dew Amid the garden's brilliant show."

7. TRIENTALIS.

1. T. EUROPÆA. Chickweed Winter-green. May-July. 24

In woods and on rough turfy heaths. Side of Raincliffe, and on the east side of Seamer moor, near Scarbro'. On the top of Swill hill, five miles from Halifax, on the road to Keighley. Several places on the Hambleton hills. Near Blubber Houses, on the road from Harrogate to Skipton. On several parts of Rumbald's moor. Holwick fell, near Middleton, Teesdale.

8. SAMOLUS.

1. S. VALERANDI. Brook-weed. July—September. 4

Sides of ditches. Tilmire, Heslington fields, and Stockton forest, near York. On the moor from Holme on Spalding moor to Hotham.

ORDER LVI. LENTIBULARIÆ.

1. PINGUICULA.

1. P. VULGARIS. Butter-wort. May—July. 4. On bogs and moist heaths, frequent.

2. UTRICULARIA.

1. U. VULGARIS. Hooded Water Milfoil. June-July. 4

In ponds and ditches. Hob moor brick-ponds, and other places near York. Crambe beck, near Castle Howard. In the carrs, near Doncaster. Old Malton ings. Near Beverley and Hull.

M. Hayne, of Berlin, has observed, that the vesicles at the roots of each species consist of a transparent, tough, horny, and elastic membrane, and are furnished with an aperture, closed by a lid that only opens outwardly. Before the flowers appear, the vesicles are filled with water; but when the plant brings forth the scape, and approaches the time of flowering, the water disappears and air is seculed in them, by which means the plant rises to the surface of the water, so that the flowers may unfold in the open air; when the flowering is over, the vesicles are again filled with water, and the plant sinks to the bottom.

2. U. MINOR. Lesser Hooded Water Milfoil. July. 4

In ponds and ditches. Several places near Selby. Ditches on Thorne moor. Leckby carr. Staveley carrs, on the road from Staveley to Boroughbridge.

ORDER LVII. SCROPHULARINEÆ.

1. VERONICA.

- 1. V. Serfyllifolia. Smooth Speedwell. May—June. 4. On bank sides and in pastures, frequent.
- 2. V. BECCABUNGA. Brooklime. June—July. 4. Ditches, &c. frequent.
- 3. V. ANAGALLIS. Water Speedwell. July—September. 4

 In ditches and muddy watery places. Near York, frequent. Near Skipton, &c. &c.
- 4. V. SCUTELLATA. Narrow-leaved Moor Speedwell. July—August. 24

 In ditches chiefly on moors on sandy soil. Sand pit on Stockton common, and on Knavesmire, near York. Bradford moor. Rumbald's moor. Sandbeck, near Richmond. Cotherstone fell. Terrington carr. On Cockitt moss, near Settle. Askham bogs. Old Malton ings. Top of Cob clough, near Ripponden.
- 5. V. officinalis. Common Speedwell. May—June. 4. On dry sandy banks, frequent.
- 6. V. CHAMÆDRYS. Wild Germander. May—August. 4. Hedge banks and pastures, frequent.

This very common plant is not exceeded in beauty by any foreign species of the genus. Its bright blue flowers have doubtless attracted notice; and in falling off too soon, gives us a lesson on the short duration of our enjoyments.

- 7. V. Montana. Mountain Speedwell. May—July. 24

 In woods near the mill at Kirkby Hall, near Ouseburn. At Castle Howard. Thorp Arch woods. Billy Bank wood, near Richmond. Cliff wood, near Bradford. Teesdale. Cave Hall wood, near Settle. Near Sleights. Firby wood, near Malton. Woods near Halifax.
- 8. V. Agrestis. Field Speedwell. Procumbent Speedwell. Apr—Sep. ①
 In cultivated ground too frequent.
- V. Arvensis. Wall Speedwell. May—June. ⊙
 On walls, dry banks and gravelly soil, frequent.
- V. POLITA. Grey Procumbent Field Speedwell. April—September. ⊙
 A weed very common in nursery grounds and gardens near York.
 Little bank, near Settle.

2. RHINANTHUS.

- R. CRISTA GALLI. Yellow Rattle. May—July.

 In barren meadows and pastures, frequent.
- 2. R. MAJOR. Large Bushy Yellow Rattle. July—September. ⊙

 In corn fields, but not confined to them. Amongst the tall ling on Stockton common. On Suett carr, seven miles north of York. On Bramham moor, in corn fields. On the road sides from Marston to Wetherby. Near Greta bridge. Near Holme on Spalding moor. From New Village to South Cave. Applegarth, near Richmond. Moors near Helmsley.

This plant, which will be found to be pretty common in Yorkshire, appears in the greatest abundance on every piece of ground newly broken up on both sides of the road from York to Scarbro', from the three mile stone to the five and a half; the first year in such abundance as to nearly destroy the crop; the second year sparingly; and the third year I was not able to find a plant on the ground where it had been abundant.

3. PEDICULARIS.

- 1. P. PALUSTRIS. Tall Red Rattle. June—August. 4. In marshes and boggy meadows, frequent.
- 2. P. SYLVATICA. Dwarf Red Rattle. Louse-wort. April—June. 4
 In open pastures and on moors, frequent.

4. BARTSIA.

- 1. B. Alpina. Alpine Bartsia. July. 24
 On the borders of mountain rivulets. Below Cronkley scarr, and at Widdy bank, above Middleton, in Teesdale.
- 2. B. ODONTITES. Red Bartsia. June—August. ①
 In pastures and on waste ground, frequent.

5. EUPHRASIA.

1. E. officinalis. Eye-bright. July—September. ©
On heaths and in barren pastures, frequent.

Acronycta Euphrasii may be found on this plant.

6. ANTIRRHINUM.

- 1. A. CYMBALARIA. Ivy-leaved Snapdragon. May—November. 4
 On old walls near York, abundant; probably escaped from gardens.
 Pontefract Castle. Old walls near Settle. Walls at Londesbro'.
 Richmond.
- 2. A. ELATINE. Sharp-leaved Fluellin. July—September. ⊙
 In corn fields on gravelly or chalky soil. Thorp Arch.

Discovered at Thorp Arch in September, 1837, by my young friend, O. A. Moore, Esq.

3. A. LINARIA. Common Yellow Toadflax. June—August. 4. In hedges and corn fields, on gravelly soil.

The larva of Calophasia Linariæ feeds upon the flowers.

- 4. A. MINUS. Least Snapdragon. June—September. ①

 In sandy fields and waste ground. Near Kippax limekilns. Castle Howard. Thorp Arch. Bramham. Walkington, three miles south east of Beverley. Between Bilton and Cowthorpe.
- 5. A. Majus. Great Snapdragon. May—October. 4.
 On the walls of Barnard Castle, Skipton Castle, &c. and several other similar situations, probably originating from gardens.
- 6. A. ORONTIUM. Lesser Snapdragon. July—August. ⊙
 Fields near Helmsley. (Rev. W. Hinckes.)

7. LIMOSELLA.

8. DIGITALIS.

1. D. PURPUREA. Foxglove. June—July. &

By the sides of fields and hedge banks, frequent.

A white variety in the old road from Settle to Wray, through Mewith.

9. SCROPHULARIA.

- 1. S. Nodosa. Knotty-rooted Figwort. July—September. 4.
 On waste ground and in hedges, frequent.
- 2. S. AQUATICA. Water Figwort. Water Betony. July—August. 4. In watery places.

The larva of Gortyna flavago, (the Frosted Orange,) feeds on the pith; Cucullia Scrophularia, (the Water Betony,) feeds upon the plant.

3. S. VERNALIS. Yellow Figwort. April—May.

Under hedges between Burrell and Cowling Hall, near Bedale. On the side of the road from Catterick bridge to Scotch corner. Woods near Fountain's Abbey. Balby, near Doncaster.

ORDER LVIII. OROBANCHEÆ.

1. OROBANCHE.

- O. Major. Greater Broom-rape. June—July.

 In bushy places, growing on the roots of broom or furze. Near Gateforth. Near Ingleton. Near Malton. It formerly grew in a piece of rough ground called the Binns, in Southowram, near Halifax, but is now eradicated.
- 2. O. ELATIOR. Tall Broom-rape. July—August. $\mathcal U$ Bealby pits, near Malton. Fields above Swinton, near Malton.

In one of the notes with which Mr. J. Backhouse has kindly furnished me, he remarks that he has always found this species on Centaurea scabiosa.

3. O. MINOR. Lesser Broom-rape. July—August. ⊙
Corn fields at the Crofts-heads at Sowerby, near Thirsk.

2. LATHRÆA.

1. L. SQUAMARIA. Tooth-wort. April—May. 24

In shady places amongst decayed vegetable soil. Woods at Thorp Arch and Bramham. Wetherby grange. Low Holme, in the hedge near the Esk, and by the river near to the Newbiggin foot bridge, opposite the alum works. Woods near the dripping well, Knaresbro. In a wood half a mile from Ripley. Near Helmsley. Roche Abbey. In Illingworth Clough; Hollins wood, in Warley; Still wood, near the Triangle Inn, Sowerby; and in Small Lees wood, Ripponden; all near Halifax. At May Royd, near Hebden bridge. Newbiggin and Sleights, near Whitby. In Crow Nest wood, below the road, three miles north west of Settle. In the wood near Kirkham Abbey. In woods west of Richmond, frequent. Rokeby woods. Edlington and Warmsworth woods, near Doncaster. Woods near Rotherham.

ORDER LIX. MELAMPYRACEÆ.

1. MELAMPYRUM.

- M. PRATENSE. Yellow Cow-wheat. July—August.

 In woods and bushy places on damp soils, frequent.

 A white variety near Thorp Arch.
- 2. M. SYLVATICUM. Wood Cow-wheat. June—August. ①

 In woods, most frequent under firs. Thorp Arch woods, sparingly.
 In several woods on the Hambleton hills. In the woods at Castle
 Howard and Kirkham. Hildenley wood. In the Shroggs, near
 Winch bridge, Teesdale. Helks wood, near Ingleton.

ORDER LX. VERBENACEÆ.

1. VERBENA.

1. V. officinalis. Vervain. June—August. 4

On dry ground by way sides, and on old walls. On the walls and in the moat at York, in abundance. Rufforth. Egton bridge.

ORDER LXI. LABIATÆ.

1. SALVIA.

1. S. VERBENACA. Wild Clary. June—October. 4

On waste ground, where the bottom is dry. Abundant in the moat at York. On the road from York to Helmsley. Near Oswaldkirk. North cliff, Castle yard, Scarbro'. Rocks on the Priory gate, Knaresbro'. Near Coatham. On the Abbey walls at Kirkham. Castle bank, Richmond. Ellershaw. Wensley. Newton dale, seven miles north of Pickering.

2. LYCOPUS.

1. L. EUROPÆUS. Gipsy-wort. Water Horehound. July—August. 4

By the sides of rivers and ditches, frequent.

3. AJUGA.

A. REPTANS. Common Bugle. May—July.

In woods, meadows and pastures, frequent.

A pure white variety grows in the meadows in Thief lane, near York.

4. TEUCRIUM.

1. T. SCORODONIA. Wood Sage. June—July. 4
In woods and bushy places on poor sandy soil, frequent.

2. T. SCORDIUM. Water Germander. July—August. 4.
Bolton beck, near the village.

Mr. J. Ward, of Richmond, observes, this is probably the most northerly habitat of this species in Great Britain.

5. LEONURUS.

1. L. CARDIACA. Motherwort. July-August. 4

On rubbish and in waste places. Not far from Grewelthorpe, near Ripon. On the road from Knaresbro' to Scotton. Near the bridge at Sutton on Derwent. Hackfall. Lane leading from the Balby road to Car House, near Doncaster.

6. GLECHOMA.

1. G. HEDERACEA. Ground Ivy. April—June. 4.

By road sides and on hedge banks, frequent.

7. MENTHA.

1. M. SYLVESTRIS. Horse Mint. August—September.
Waste ground in watery places. Near Wass, on the road from Ampleforth to Coxwold. Near Stillington, ten miles north of York. Ditches on the side of Thorne moor.

2. M. ROTUNDIFOLIA. Round-leaved Mint. August—September. \mathcal{U} On the sides of ditches and rivers. On Ribble bank, just below the snuff mill, half a mile from Settle.

3. M. VIRIDIS. Spear Mint. August. 4.

In marshy places and by river sides. On the willow island, a mile and a half below Settle. On the river bank, near Copgrove. Near Pickering.

4. M. PIPERITA. Pepper Mint. August—September.

In watery places. In the brick ponds, Hob moor, near York. In the brook just below the village of Giggleswick. In a sandy lane leading from Snydall to Pontefract. Several places on the Wolds. In the canal near Esholt. Aske wood, near Richmond.

- 5. M. Hirsuta. Hairy Mint. August—September. 4
 In watery places, frequent.
- M. ACUTIFOLIA. Sharp-leaved Mint. August—September.
 \(\mu \)
 On river banks. On the banks of the Ribble, below Settle. In the village of Giggleswick.
- M. Rubra. Tall Red Mint. September. 4
 On the banks of rivers and ditches. Abundant on the willow island, and on the opposite bank of the Ribble, below Settle. Potteric carr, Doncaster.
- 8. M. GENTILIS. Bushy Red Mint. July—August. 4
 In watery places. In the wet ditch between Giggleswick and Beggar's wife bridge.
- 9. M. ARVENSIS. Corn Mint. August—September. 4. Corn fields, frequent.
- 10. M. AGRESTIS. Rugged Field Mint. August—September. 4

 In a narrow lane between Settle and the river at Commack; also in the village of Giggleswick.

No class of insects appears to be fond of any of the species of mint. Coleoptera are very seldom seen near where mint grows. The only caterpillar I have seen feeding upon it is Spilosoma papyrata, (the Water Ermine.)

8. BALLOTA.

1. B. NIGRA. Black Horehound. July—October. 4
On hedge banks and waste ground. In the vale of York, very frequent; but rare in the higher parts of the county.

A white variety grows at Clifton, near York.

Apion vernale may be found on this plant; likewise the larva of Anarta Heliaca, (the Small Yellow Underwing.)

9. MARRUBIUM.

1. M. VULGARE. White Horehound. July—August. 4

Dry ground by road sides. On the York road, one mile from Green Hammerton. Near Boroughbridge. Near Catterick, and other places in Leeming lane. Bramham moor. Near Pontefract.

10. STACHYS.

- 1. S. SYLVATICA. Hedge Woundwort. July—August. 4
 In hedges in shady situations, frequent.
- 2. S. PALUSTRIS. Marsh Woundwort. August. 4
 On the banks of ditches, frequent. In corn fields about York.

The roots of this species are tuberous; and by cultivation have been found to produce an excellent vegetable for the table.

- 3. S. ARVENSIS. Corn Woundwort. July—August. ⊙

 In dry gravelly corn fields. Heslington fields, near York. Thorp

 Arch. West and north sides of the river at Catterick bridge.
- 4. S. GERMANICA. Downy Woundwort. September. 4
 Plentiful in all the woods about Castle Howard. (Mr. Spruce, Ganthorpe.)

11. BETONICA.

B. OFFICINALIS. Wood Betony. July—August.

 — In woods and shady places, frequent.

 A white flowered variety grows near York.

12. GALEOBDOLON.

1. G. LUTEUM. Yellow Dead Nettle. May—June. 4

In moist hedge bottoms and in woods. Thorp Arch. Bramham. Near Helmsley. Bell Bank wood, near Bingley. Woods at Londesbro'. Woods near Doncaster. Near Whitby. Woods near Halifax, very common.

13. LAMIUM.

1. L. album. White Dead Nettle. April—October. $\mathcal U$ In hedges and borders of fields, frequent.

The larva of Plusia Iota, (the Golden Y,) feeds on this plant.

- 2. L. PURPURRUM. Red Dead Nettle. April—September.
 In waste and cultivated ground everywhere,
 A white flowered variety occurs near York.
- 3. L. Incisum. Cut-leaved Dead Nettle. May—September. ⊙
 In cultivated and fallow fields. Heslington fields and other places, near York. Near Richmond. Giggleswick. Near Halifax.
- 4. L. AMPLEXICAULE. Henbit Dead Nettle. March—September. ⊙
 In sandy and gravelly fields, not unfrequent.

14. NEPETA.

1. N. CATARIA. Cat Mint. June—September. 24

On hedge banks by road sides. Four miles on both sides of the road from York to Tadcaster. On the road from Wetherby to Tadcaster. Barrow's cliff and Oliver's mount, Scarbro'. Near Green Hammerton. In the lane leading from Richmond to Brompton. Near the mill in the lane leading from Car House to the Car, Doncaster.

15. GALEOPSIS.

- 1. G. LADANUM. Red Hemp Nettle. July—September. ①
 In dry gravelly fields, not uncommon.
- G. VILLOSA. Downy Hemp Nettle. July—August. ⊙
 In sandy corn fields. Near Thirsk. Gateforth, near Selby. On the Wolds. Formerly grew on Beacon hill, near Halifax; but has long since disappeared.
- 3. G. TETRAHIT. Common Hemp Nettle. July—August. ⊙
 In cultivated ground, frequent.

4. G. VERSICOLOR. Large-flowered Hemp Nettle. July—September. ①
In poor sandy corn fields and in ditch bottoms, frequent.

16. SCUTELLARIA.

1. S. GALERICULATA. Common Skull-cap. July—September. ${\cal U}$ Wet ditches and damp places, frequent.

Well worthy of cultivation as a garden plant; it will grow in any soil.

2. S. MINOR. Lesser Skull-cap. July—August. 24

In Bradley lane, near Huddersfield. Langfield moor, near Todmorden. Terrington carr. Doncaster. (Mag. Nat. Hist.)

17. THYMUS.

1. T. SERPYLLUM. Wild Thyme. July—September. 24
On heaths and dry ground, frequent.
With white flowers on hills between Settle and Malham tarn, on limeste

With white flowers on hills between Settle and Malham tarn, on limestone soil.

- T. Acinos. Basil Thyme. July—August.
 O
 By the sides of cultivated fields, on light soil. Thorp Arch. Banks of the Went, near Ferrybridge. On the Hambleton hills. On the Castle Howard road, three miles from Malton.
- 3. T. CALAMINTHA. Common Calamint. July—August. 24

 Sides of roads and corn fields. On the hill at Brandsby. On the south side of Scarbro' Castle walls. On the Abbey rocks, at Knaresbro'. Dry banks near Bishop Burton. Castle bank, Richmond.
- 4. T. NEPETA. Lesser Calamint. August. 24
 On dry banks and road sides.

18. PRUNELLA.

1. P. VULGARIS. Self-heal. June—September. 4

In meadows and pastures, frequent.

With white flowers near York.

19. CLINOPODIUM.

C. VULGARE. Wild Basil. August. 24
 In bushy places and on hedge banks on poor soil. Heslington fields, near York. Thorp Arch.

20. ORIGANUM.

1. O. VULGARE. Marjoram. July—September. 24

On road sides and rough stony places. On the road from York to Malton. Pickering Castle. Scarbro' Castle. Tadcaster. Thorp Arch. Road side near Skipton Castle, &c. &c.

DIVISION II. MONOCHLAMYDEÆ.

CALYX ONLY PRESENT. COROLLA NONE.

ORDER LXII. ELÆAGNEÆ.

1. HIPPOPHÄE.

1. H. RHAMNOIDES. Sea Buck-thorn. March—May. ?

On sandy cliffs near the sea. Cliffs between Whitby and Land's end.

This shrub possesses considerable beauty of foliage, and grows well in any common soil; it is likewise valuable as affording shelter near the sea.

ORDER LXIII. THYMELEÆ.

1. DAPHNE.

1. D. MEZEREUM. Mezereon. February—March. b

In a shrubby natural wood at Feizer, four miles north west of Settle, on limestone. In a hedge at St. Trinien's, on clayey soil, apparently wild. Also on a small island in the middle of the Swale, below the Foss.

One of our most valuable garden shrubs; which, for the early appearance and fine scent of its blossoms, stands without a rival. A white variety may be had at the nurseries; and also one that flowers from October to January.

2. D. LAUREOLA. Spurge-laurel. February-April. b

In woods and hedges. In the hedges on both sides of the road near cross roads from Tadcaster to Leeds. About Bramham. Barmston winn. Side of the hill on the north sands, Scarbro'. Woods at Roche Abbey. Londesbro' woods. Near Thirsk. Near the Priory gate, and in the Castle moat, Knaresbro'. Yearby, near Kirkleatham. Horton, near Bradford. Ferrybridge. Pontefract. Near Castle Howard farm-house. Near Richmond, frequent. Frequent near Doncaster. Larpool wood, near Whitby, &c. &c.

ORDER LXIV. POLYGONEÆ.

1. RUMEX.

- 2. R. CRISPUS. Curled Dock. June—July. \mathcal{U} In waste ground and in pastures.
- 3. R. obtusifolius. Broad-leaved Dock. July—August. 4. In waste ground, pastures, and by road sides.
- 5. R. HYDROLAPATHUM. Great Water Dock. July—September. 24

 In ditches and sides of rivers. Askham bogs, near York. Ponds near Ripon. By the river Derwent, between Crambe beck and Kirkham.
- 6. R. Acetosa. Common Sorrel. June. 24
 In meadows and pastures, frequent.
- 7. R. Acetosella. Sheep's Sorrel. June—July. 4. In dry fields and on moors, frequent.

The different species of Rumex supply food to the larvæ of the following insects:—Leucania comma, (the Shoulder-stripe Wainscot;) Leucania pallens, (the Common Wainscot;) Phragmatohia fuliginosa, (the Ruby Tiger;) Glæa rubpicosa, (the Red Chesuut;) Pyrophila Tragogogais, (the Mouse;) Dypterygia Pinastri, (the Bird's Wing;) Mamestra Suasa, (the Dog's Tooth;) Euplexia lucipara, (the Small Angleshades;) Trachea Atriplicis, (the Wild Arrach;) Polia flavocincta, (the Large Ranunculus;) and Aeromycia Rumicis, (the Knot Grass.)

2. POLYGONUM.

- 1. P. AMPHIBIUM. Water Persicaria. July—September. 4. In rivers and ponds, frequent.
- 2. P. Persicaria. Spotted Persicaria. July—August. ⊙
 In ditches and wet fields, frequent.
- 3. P. LAPATHIFOLIUM. Pale-flowered Persicaria. July—August.
 In moist situations near dunghills. Holdgate, and Heslington fields, near York.
- 4. P. HYDROFIPER. Biting Persicaria. September. ①
 In ditches and watery places, frequent.

The larva of Trachea Atriplicis, (the Wild Arrach,) feeds on this plant.

- 5. P. MINUS. Small Creeping Persicaria. September. ⊙
 On gravelly watery commons. Near Ripon. In the river Foss, at
 York. Woodmansea, two miles south east of Beverley. Bolton beck, near Richmond.
- P. BISTORTA. Great Bistort, or Snake-weed. June—July. 24
 In meadows and pastures. Water Fulford, Clifton ings, and other places, near York. Northallerton. Bradford. Halifax. Ganthorpe. Castle Howard. West field, near Richmond. Near Roche Abbey. Londesbro'.
- 8. P. AVICULARE. Knot Grass. April—October. ⊙ Frequent everywhere.

The larva of Aspilates purpuraria, (the Purple-barred Yellow,) feeds on it.

- 9. P. FAGOPYRUM. Buck Wheat. July—August. ①
 In cultivated fields; not wild.
- 10. P. convolvulus. Black Bindweed. June—September. ①
 In corn fields, hedges, &c. frequent.

ORDER LXV. CHENOPODEÆ.

1. SALSOLA.

1. S. KALI. Saltwort. July. \odot

On the sea coast. At Redcar and Coatham, at the mouth of the Tees. (North sands, Scarbro'. B. G.)

2. SALICORNIA.

3. CHENOPODIUM.

- 1. C. BONUS HENRICUS. Good King Henry. May—August. 24
 In waste ground and road sides, frequent.
- C. Rubrum. Red Goosefoot. August. ⊙
 Waste ground by way sides. Lane near Dalby, five miles from Castle Howard. Near York, frequent.

3. C. Album. White Goosefoot. July—August.

Waste ground, frequent.

The larva of Electia comitata, (the Dark Spinach,) feeds on it.

- 4. C. Maritimum. Sea Goosefoot. July—August.
 Salt marshes at Coatham, mouth of the Tees.
- 5. C. Acutifolium. Sharp Entire-leaved Goosefoot. July—August.

 Heslington fields, &c. near York.
- C. Urbicum. Upright Goosefoot. July—August.

 Between Fulford and Heslington, and other places near York.

4. BETA.

1. B. Maritima. Sea Beet. August. \mathcal{V} On the sea shore. Castle dikes at Scarbro', abundant. On Coatham marshes, at the mouth of the Tees.

5. ATRIPLEX.

The larva of Trachea Atriplicis, (the Wild Arrach,) feeds on this plant.

- 2. A. ANGUSTIFOLIA. Narrow-leaved Orache. June—August. ① Waste ground, with the preceding.
- 3. A. LACINIATA. Frosted Sea Orache. July. ①
 On the north sands, Scarbro'.

ORDER LXVI. SCLERANTHEÆ.

1. SCLERANTHUS.

ORDER LXVII. URTICEÆ.

1. PARIETARIA.

1. P. Officinalis. Wall-pellitory. June—September. 4.

Crevices of old walls, with a southerly aspect, frequent.

2. URTICA.

- 1. U. URENS. Small Nettle. June—October. ①
 On light soils, frequent.
- 2. U. DIOICA. Great Nettle. July—August. 4.
 Waste ground and hedge bottoms, frequent.

The Nettle affords food to a number of insects; amongst others—Argynnis Paphia, (the Silverwashed Fritillary;) Vanessa C. album, (the White Comma;) Vanessa Urticæ, (the Small Tortoiseshell;) Vanessa Io, (the Peacock;) Vanessa Atalanta, (the Admirable;) Hypercompa Dominula, (the Scarlet Tiger;) Spilosoma Menthrastri, (the Ermine;) and Nænia typica, (the Gothic.)

3. HUMULUS.

1. H. LUPULUS. The Hop. July. 4

In hedges, but not common.

No plant makes a more beautiful pyramid for the flower garden than the hop; it may be trained to a pole, with very little trouble, from 14 to 18 feet.

It affords food to the following insects; Vanessa C. album, (the Comma;) Hepialus Humuli, (the Ghost Moth;) Dasychira fascelina, (the Dark Tussock;) and Mamestra Persicariæ.

ORDER LXVIII. RESEDACEÆ.

1. RESEDA.

- 1. R. LUTEOLA. Dyer's Rocket. July—August. ⊙ and ♂ Waste ground and in stone quarries, not uncommon.
- 2. R. LUTEA. Wild Mighionette. July—August. ⊙
 By the sides of fields and waste places, on limestone.
- 3. R. FRUTICULOSA. Shrubby Base Rocket. September—October. 24

 Within a few yards of the banks of the river Rye, between Nunnington and West Ness, five miles south west of Kirkby Moorside; found in 1837, by Mr. Ibbetson, schoolmaster, Dunnington.

ORDER LXIX. EUPHORBIACEÆ.

1. EUPHORBIA.

- 2. E. EXIGUA. Dwarf Spurge. July—September. ⊙
 In sandy corn fields, frequent.
- 3. E. HELIOSCOPIA. Sun Spurge.
 Cultivated ground very common.

4. E. CYPARISSIAS. Cypress Spurge. 4

One mile from Hornsea, on the road to Hull.

The larva of Acronycta Euphorbiæ, (the Spurge,) feeds on it.

E. STRICTA β was found near York, in Ray's time, but has not been lately seen. The Rev. W. Hincks has in his herbarium a single specimen of a Euphorbia, brought to him to be named as being a wild plant found in the neighbourhood, which seems to be E. hiberna; but the precise place of its growth is not known.

2. MERCURIALIS.

1. M. PERENNIS. Perennial Mercury. April—May. 4. On hedge banks and woods, frequent.

3. BUXUS.

1. B. SEMPERVIRENS. The Box-tree. April. 12

Hedges at Kilburn, near Coxwold. (B. G.) There is a Box-tree at Thornton, near Pickering, nearly fourteen feet high.

ORDER LXX. EMPETREÆ.

1. EMPETRUM.

1. E. NIGRUM. Black Crow-berry. May. Iz
On peaty moors. Seamer moor, and other moors near Scarbro'.
Black moor, above Kirkby Knowle. On all the moors near Settle.
Cotherstone fell. Cronkley fell. &c. On Otley Chevin. On all the
high moors in the neighbourhood of Halifax.

ORDER LXXI. ARISTOLOCHIÆ.

1. ASARUM.

1. A. Europæum. Asarabacca. May. 4

Broad Bottom wood, near Mytholm Royd, five miles west of Halifax. In an old hedge and deep dry ditch between Grain House and Fieldgate, two miles west of Settle.

ORDER LXXII. CERATOPHYLLEÆ.

1. CERATOPHYLLUM.

1. C. submersum. Hornwort. September. 4

On Foss Island, and in the Foss at York. In the ponds at Newburg.

ORDER LXXIII. ULMACEÆ.

1. ULMUS.

1. U. SUBEROSA. Cork-barked Elm. March. Tree.

Hedges on the road side from York to Grimstone. St. Trinien's, near Richmond. In the lane on the road to Aske.

- 2. U. CAMPESTRIS. Common Elm. Tree. Hedges in various places.
- 3. U. MONTANA. Witch Elm. March—April. Tree Clink bank, near Richmond.

Amongst many others, the larva of Vanessa C. Album, (the White Comma;) Vanessa Polychloros, (the Large Tortoise-shell;) Pygara bucephala, (the Buff Tip;) Orthosia munda, (the Twin-spotted Drab;) Orthosia stabilis, (the Quaker;) Orthosia macilenta, (the Brick:) Xylina petrificata, and Miselia bimaculosa, may be found on the Elm.

DIVISION III. ACHLAMYDEÆ.

ORDER LXXIV. AMENTACEÆ.

1. BETULA.

 B. Alba. The Common Birch. April—May. Tree. In woods and hedges, frequent.

The Birch supports a numerous family of insects; amongst others, Vanessa Antiopa, (the Camberwell Beauty;) Thecla Betula, (the Brown Hair Streak;) Cerura fuscinula. Stauropus Fagi, (the Lobster;) Leiocampa dictæa, (the Swallow Prominent;) Leiocampa dictæoides, (the Small Swallow Prominent;) Lophopterys camelina, (the Cocksomb Prominent;) Lophopterys camelina, Pilophora variegata. Endromis versicolora, (the Keutish Glory;) Lasiocampa Quercus, (the Great Egger;) Pæcitocampa Populi, (the December Moth;) Friogaster lanestris, (the Small Egger;) Demas Coryli, (the Nut Tree Tussock;) Callimorpha miniata, (the Red Arches;) Lithosia quadra, (the Large Footman;) Orthosia miniosa, (the Blossom Underwing;) Orthosia litura, (the Brown Spot Pinion;) Apronycta Leporina, (the Miller;) Acronycta Alni, (the Alder;) Acronycta auricoma, (the Scarce Dagger;) Acronycta Euphrasiæ. Ceropacha fluctuosa, (the Satin Carpet;) and Ceropacha flavicornis.

2. ALNUS.

1. A. GLUTINOSA. The Alder. March. Tree.

In wet and damp situations, frequent.

The larvæ of Stauropus Fagi, (the Lobster;) Notodonta dromedarius, (the Rusty Prominent;) Endromis versicolora, (the Kentish Glory;) Apetala Leporina, (the Miller;) Acronycta Almi, (the Alder;) and Acronycta Psi, (the Dagger;) feed on this.

3. SALIX.

- S. TRIANDRA. Long-leaved Triandrous Willow. May—August. Tree.
 In wet woods, hedges and osier grounds. Skeeby, near Richmond.
- 2. S. LANCEOLATA. Sharp-leaved Triandrous Willow. April—May. Tree.
 In low meadows.

- 3. S. ROSMARINIFOLIA. Rosemary-leaved Willow. June. 12
 Saltersgate. Seamer water, Wensleydale. Kirkby Moorside.
- 4. S. HERBACEA. Least Willow. June. 52
 On Ingleborough.
- [The fourteen species immediately following, growing wild in the county, have been kindly furnished me by J. Ward, jun. Esq. Richmond.]
- 5. S. ACUMINATA. Long-leaved Willow. April. Tree.
 Near Colburn Warthe.
- 6. S. Pentandra. Sweet Bay-leaved Willow. June—July. Tree.
 Ravensworth. Near Sedbury. Seamer water. Frequent near Hull.
- 7. S. BICOLOR. Shining Dark-green Willow. April—May. 5 Banks of the Swale, about Richmond.
- 8. S. DECIPIEN'S. Varnished Willow. May. Tree.
 Aske wood and East Layton, near Richmond.
- 9. S. FRAGILIS. Crack Willow. April—May. Tree.
 Banks of the Swale.
- S. LAMBERTIANA. Boyton Willow. March—April. Tree. Banks of the Swale, abundant.
- 11. S. FORBIANA. Fine Basket Osier. April. E. Banks of the Swale, on the Batts.
- S. RUBRA. Green-leaved Osier. April—May. Tree. Banks of the Swale, at St. Martin's, below the line mill.
- 13. S. REPENS. Common Dwarf Willow. May. 12

 In a marsh, near Bellerby. Near York, frequent.
- 14. S. PROSTRATA. Early Prostrate Willow. March—April. 52
 Ravensworth, near Richmond.
- S. CINEREA. Grey Willow. April. Tree Billy Bank wood, near Richmond.
- S. OLEIFOLIA. Olive-leaved Sallow. March. Tree. Banks of the Swale, near Colburn.
- 17. S. Andersoniana. Green Mountain Sallow. April—May. &

 In a marshy field on the west side of Ravensworth, near Richmond.
- 18. S. SMITHIANA. Silky-leaved Osier. April—May. 52
 Clink bank, near Richmond.
- 19. S. PURPUREA. Bitter Purple Willow. March. 12

 In the low grounds between Beverley and Hull.

- 20. S. CROWEANA. Broad-leaved Monadelphous Willow. April—May. 72

 Above Barnard Castle, and near Egglestone mill dam.
- 21. S. RUSSELLIANA. Bedford Willow. April—May. Tree.
 On the banks of the Tees.
- 22. S. ARGENTEA. Silky Sand Willow. May. & On the slope of ———— between Kilnsey and Arncliffe.
- 23. S. Fusca. Brownish Dwarf Willow. May. 5

 Several places near Hull. Near Market Weighton. Vale of Pickering.
- 24. S. CAPREA. Great Round-leaved Willow. March. 52
 On Stockton forest, Langwith, and many other places in Yorkshire.

Brepha notha, and Parthenias, may be found, early in March, hovering over the Catkins on Stockton forest.

The different species of Willow, in the various stages of their existence, afford food to an astonishing number of insects. The root, pith, wood, both the inner and outer bark, and leaves, each support numerous species, in all the different orders from the minute Coccus to the splendid Vanessa Antiopa. The following are a few of the most shewy Lepidoptera found on them. Those marked thus *have been found in Yorkshire. *Vanessa Antiopa, (the Camberwell Beauty;) Apatura Iris, (the Purple Emperor;) *Smerinthus occlutus, (the Eyed Hawk;) Trochilium Crabroniformis, (the Lunar Hornet;) *Cossus kigniperda, (the Goat Moth;) *Pyggara bucephala, (the Butt Tlp;) Cerura bicuspis; *Cerura furcula, (the Kitten;) *Cerura Vinula, (the Puss;) Cerura Ermina; *Leiocampa dictica, (the Swallow Prominent;) *Leiocampa dicticavides, (the Small Swallow Prominent;) *Lophopterys camelina, (the Coxcomb Prominent;) *Philodontis palpina, (the Pale Prominent;) *Philophore variegata; (the Small Egger;) Gastropacha Quercifolia, (the Lappet;) *Leucoma Salcies, (the White Satin;) *Hypercompa Dominula. (the Scarlet Tiger;) Orthosia gracitis, (the Lead-colour Drabl;) *Orthosia of Sparsa, (the Powdered Quaker;) Orthosia litura, (the Brown-spot Pinion;) Orthosia Lota, (the Red-line Quaker;) Orthosia of Unision, (the Dings Sheers;) *Nænia typica, (the Gothic;) *Apatela Leporina, (the Miller;) *Acromycta Almi, (the Alder;) *Calyptra Libatrix, (the Herald;) and Bombycta Viminalis, (the Minor Shoulder Knot.)

ORDER LXXV. CUPULIFERÆ.

1. FAGUS.

- 1. F. SYLVATICA. The Beech. April—May. Tree In woods.
- 2. F. CASTANEA. The Sweet Chesnut. May. Tree.

2. QUERCUS.

- 1. Q. ROBUR. British Oak. April. Tree. Woods and hedges, frequent.
- 2. Q. SESSILIFLORA. Sessile-fruited Oak. April—May. Tree.
 In woods and hedges, near Richmond. Near Settle.

3. CORYLUS.

1. C. AVELLANA. Hazle Nut. March—April. b

In woods and hedges, frequent.

The larva of Vanessa C. Album, (the White Comma;) Stauropus Fagi, (the Lobster;) Notodonta dromedarius, (the Rusty Prominent;) Endromis versicolora, (the Kentish Glory;) Clisocampa Neustra, (the Lackey;) and Demas Coryli, (the Nut-tree Tussock,) feeds on this species.

4. CARPINUS.

1. C. Betulus. The Hornbeam. May. Tree.

In woods and hedges. Rose Tree Bank wood, Cave Hole wood, and various other places near Settle.

ORDER LXXVI. CONIFERÆ.

1. JUNIPERUS.

1. J. COMMUNIS. The Juniper. May. 13

Hills on the Yorkshire and Durham banks of the Tees, abundant. On the hills above the village of Wharfe, in Craven, in great abundance. Banks of the Swale, near Round Howe, sparingly.

Var. NANUS. Red scarr, near Richmond.

2. TAXUS.

1. T. BACCATA. The Yew Tree. March—April.

Alpine woods and rocks, amongst the limestone. Gordale and Giggleswick scarrs. Truly wild on limestone cliffs at Warmsworth, near Doncaster. Roche Abbey woods. Whitcliffe wood and Red scarr, near Richmond.

ORDER LXXVII. MYRICEÆ.

1. MYRICA.

1. M. GALE. Sweet Gale. May. 12

In bogs and damp peaty situations. Askham bogs and Langwith, near York. Covering many acres at Lawkland. Austwick moss. Newton dale, near Pickering.

ORDER LXXVIII. CALLITRICHINEÆ.

1. CALLITRICHE.

- C. VERNA. Vernal Water Starwort. April—May. ⊙
 In ditches, frequent.
- 2. C. AUTUMNALIS. Autumnal Water Starwort. June—October. ©
 Ditches in Terrington carr, near Castle Howard. Near Coneysthorpe.

SUB-CLASS II. MONOCOTYLEDONES.

DIVISIONS.

I. PETALOIDEÆ. II. GLUMACEÆ.

DIVISION I. PETALOIDEÆ.

ORDER LXXIX. AROIDEÆ.

1. ARUM.

1. A. MACULATUM. Lords and Ladies. Spotted Arum. April—May. 4

Borders of fields and hedge banks, frequent.

The flowers of this plant have been cited as affording a remarkable instance of the spontaneous heat generated in vegetables; which, according to the observations of Lamarck and Senebier, is evolved in a very obvious degree, for several hours subsequent to the first opening of the spatha. After the acrimony of the roots has been extracted, either by boiling or baking, they afford a very mild and wholesome farinaceous nutriment, resembling salep. At Weymouth, many hundred weights are sold annually for starch, or as nourishment for young children and invalids; and is also used in pastry and puddings.

2. ACORUS.

1. A. CALAMUS. Sweet Flag. July. 24

In the ponds at Heslington, near York. Ponds at Risby, near Beverley. Banks of the river near Howsham. Norton fish-ponds, near Sheffield. Banks of the Ouse, near Kirby Hall. Lake at the slip above Kirkby Knowle, near Thirsk. Milnsbridge, near Huddersfield. Near Doncaster.

ORDER LXXX. TYPHACEÆ.

1. TYPHA.

1. T. LATIFOLIA. Great Cat's-tail. Great Reed-mace. July. 4
In ponds and slow streams, frequent.

The curious stems of this plant, which resemble a mace, are, on some festivals of the Church in Italy, put into the hands of statues of Christ, it being considered as the reed with which the soldiers handed him the sponge of vinegar.

The larva of *Plusia Festucæ*, (the Gold-spot,) feeds upon it. The pupa is placed in a delicate white folliculus, situated beneath a leaf of the Typha, which is bent down angularly for that purpose by the larva.

2. T. Angustifolia. Lesser Cat's-tail. July-August. 4

Grew in the brick ponds on Dringhouses moor, near York, six years ago; I believe it is now destroyed. Ponds by the road side from York to Pocklington. In a pond on the York road, half a mile from Selby. In the mere at Scarbro'. Boggy pond at Howe bridge farm, near Malton.

2. SPARGANIUM.

1. S. RAMOSUM. Branched Bur-reed. July—August. 24
In strong clavey ditches, frequent.

Curtis observes, that the larvæ of *Phalæna Festucæ* feed upon the leaves; and that the rare insect *Sphex fissipes* may sometimes be detected in a web under the leaves.

- 3. S. NATANS. Floating Bur-reed. July—August. 4

 In the Foss, Hob moor, and other places near York. Scarbro'. Beverley. (Staveley carr and ponds near Ripon. B.G.)

ORDER LXXXI. FLUVIALES.

1. POTAMOGETON.

- 1. P. NATANS. Broad-leaved Pond-weed. July. 4. In pools, ditches, &c. common.
- 2. P. HETEROPHYLLUS. Various-leaved Pond-weed. July—September. 4

 Ditches near Beverley. In the river Foss at Huntington, near York.

 Malham tarn. Downholme moor, near Richmond.
- 3. P. Perfoliatus. Perfoliate Pond-weed. July—August. 4. Slow rivers and ponds, frequent.
- P. FLUITANS. Long-leaved Floating Pond-weed. July—August. 4
 Ditches near Beverley. Near Ripon. York. In the river Derwent.
- 6. P. LUCENS. Shining Pond-weed. June—July. 4
 In the rivers Derwent and Rye.
- P. CRISPUS. Curled Pond-weed. June—July.

 In the river Swale at Clink bank. Ponds at Castle Howard. Ponds at Tilmire near York. Plantation pond, Scarbro'. In the rivers Rye and Derwent. Malton ings.

- 8. P. COMPRESSUS. Flat-stalked Pond-weed. June—July. 4

 Pond at St. Trinien's, near Richmond. Ponds at Castle Howard.
 Near Beverley.
- 9. P. CUSPIDATUS. Pointed-leaved Pond-weed.

 In a rivulet at Hoyingham. (Teesdale.) It has not been found there

of late years.

- 10. P. GRAMINEUS. Grassy Pond-weed. July—August. 4

 In the river Derwent at Crambe bridge. In the ponds at Castle Howard.
- P. Pusillus. Small Pond-weed. July. 4
 Ponds near Beverley. Ponds at St. Trinien's, near Richmond. Norton ings, opposite Old Malton Abbey.
- 12. P. PECTINATUS. Fennel-leaved Pond-weed. July. $\mathcal U$ In the Rye, Foss, and Derwent.

The floating leaves of the different species afford an agreeable shade to fish, and are the habitation and food of Hydrocampa Potamogeton, (the Brown China Mark.)

2. ZOSTERA.

1. Z. MARINA. Grass-wrack. August—September. 4

Ditches in the marshes at Coatham, near Redcar.

Thrown on our shores by the tide; mounds or walls are built with it to oppose the incroachment of the sea. Buildings are thatched with the green leaves, which will endure upwards of a century. The minute Conferva zostericola, Ulva plantaginea, Berkeleya fragilis, and the rare Exilaria flabellata, are parasitic on this plant.

3. RUPPIA.

1. R. MARITIMA. Tassel Pond-weed. August—September. 4
Salt water ditches in the marshes at Coatham.

Named in honour of the German Physician, Henry Ruppius, author of "Flora Jenensis." This plant, (like Vallisneria spiralis, an inhabitant of rivers in the south of Europe,) lengthens or contracts its fruit-stalk according to the greater or less depth of water; and, assuming a spiral form, the flowers and fruit are thus borne above the surface, sinking afterwards to deposit the seeds at the bottom. The fructification is highly curious and interesting, and is beautifully illustrated in Flora Londinensis.

4. ZANNICHELLIA.

1. Z. palustris. Horned Pond-weed. July. \odot

Bolton beck, near Skeeby. In a brook near Gilling beck.

A variety with the anthers 2, 3, and 4 celled and lobed, and the stigmas toothed constituting the Z. dentata of Willdenow, is found near Richmond, by Mr. James Ward, Jun.

Named after the eminent Venetian Apothecary, Zannichelli, who published a History of Plants, and flourished about 1702.

ORDER LXXXII. PISTIACEÆ.

1. LEMNA.

1. L. TRISULCA. Ivy-leaved Duck-weed. June. •

Ditches in Askham bogs. Brick ponds on Hob moor, and several other places near York. Ditches between Hull and Beverley. In the Castle yard, Scarbro'.

L. MINOR. Lesser Duck-weed. June—July. ⊙
 Ponds near York, and throughout the county, common.

It has been observed, that various kinds of mosses which grow on walls and house tops, although dried by the heat of summer so as to become quite brittle, recover their former verdure and vegetative power by the first showers of Autumn. A fact analagous to this, referring to plants destined to grow in ponds which fail in dry seasons, affords a striking example of suspended animation and resuscitation, as communicated by Mr. Gough, of Kendal. Some plants of L. minor were collected from a pond, in July, 1797, dried four or five hours in the sun, and preserved in a small box, to March, 1800; they were then placed in a glass jar with water, and not only revived, but flowered in the following August.

- 3. L. GIBBA. Gibbous Duck-weed. June—July. © In ponds near York. Ditches near Beverley.
- 4. L. POLYRRHIZA. Greater Duck-weed.
 In ponds near York and Beverley.

moor.

ORDER LXXXIII. JUNCAGINEÆ.

1. TRIGLOCHIN.

- 1. T. PALUSTRE. Marsh Arrow-grass. June—July. 4.
 In wet boggy meadows, frequent.
- 2. T. MARITIMUM. Sea Arrow-grass. May—August. 4

 In the salt marshes at Coatham, near Redcar. On the sands between Scarbro' and Filey. Whitby.

2. SCHEUCHZERIA.

1. S. PALUSTRIS. Marsh Scheuchzeria. June—July. 4

In Leckby carr, four miles north west of Boroughbridge. Thorne

I have diligently examined Leckby carr, for five seasons, without being able to find a single specimen.

ORDER LXXXIV. ALISMACEÆ.

1. ALISMA.

1. A. PLANTAGO. Greater Water-plantain. July. 24

In pools, ditches, and on the margins of rivers, common.

2. A. RANUNCULOIDES. Lesser Water-plantain. August—October. 4

Ditch on Stockton common. Ditch on Heslington moor. In the carrs near Doncaster. Ditches between Woodend and Newsham. Carlton moor, near Thirsk. About Beverley. On the common at Ripon. About Copgrove common. In a pond on the west side of Castle Howard Park. Downholme moor. In a pond near Bellerby, four miles north of Middleham.

2. SAGITTARIA.

1. S. SAGITTIFOLIA. Arrow-head. July-August. 4

In the river Foss, near York. In the Wiske, near Northallerton. Potteric carr, Doncaster. In the spring dike, Hull. Beverley. In a pond at Milnsbridge, near Huddersfield.

The bulb which grows at the lower part of the root, constitutes a considerable part of the food of the Chinese; it is cultivated in wet swampy situations. The North American Indians also roast the roots for food.

ORDER LXXXV. HYDROCHARIDEÆ.

1. STRATIOTES.

1. S. Aloides. Water-soldier. June-September. 24

In ditches near Beverley. (Scaum's Beverlac.) Potteric carr, Doncaster. In the river Derwent.

2. HYDROCHARIS.

1. H. MORSUS RANÆ. Frog-bit. July. 4

In the brick ponds at Hob moor, and in the ditches on Askham bogs, near York. Ditches and ponds near Boroughbridge. In several places near Thirsk. Easingwold. Beverley. Hull.

Curtis observes that the whole structure and economy of Frog-bit is exceedingly curious, deserving the minute attention of the inquisitive Botanist. Cultivated in ponds it grows well and has a beautiful appearance.

ORDER LXXXVI. IRIDEÆ.

1. IRIS.

1. I. PSEUD-ACORUS. Yellow Water Iris. July. 24

In ditches, ponds, &c. in the lower parts of the county, common.

Perianth occasionally varying, 8 cleft.

Named from the brilliancy of its colours, and the graceful curve of its petals, emulating, in some of the exotic species, the arch of Iris or the rain-bow.

The seeds afford an excellent substitute for foreign coffee. Being roasted in the same manner, they very much resemble it in colour and flavour. When carefully prepared, they possess much more of the aroma of coffee than is to be found in any of the leguminous or gramineous seeds that have been treated in the same way. The larva of Apamea fibrosa, (the Crescent,) feeds on it.

2. I. FŒTIDISSIMA. Stinking Iris. May. 4

Betwixt Busby and Kirkby, near Stokesley. In a wood near Law Silton. Found near Helmsley, in 1834, by the Rev. W. Hinckes. Hedges at Raskelf, near Easingwold. Behind Clark's house, Little Nunwick, near Ripon.

2. CROCUS.

1. C. VERNUS. Purple Spring Crocus. March. 4

On Knavesmire, near York, sparingly. Bierley woods, near Bradford.

2. C. NUDIFLORUS. Naked-flowering Crocus. October. 4

Meadows at Well Head, Saville Green, and several other places near Halifax.

"Of all the properties of plants," remarks the Rev. G. White, "none seems more strange than their different periods of blossoming, especially when they happen to be congenerous, and indeed scarcely to be distinguished specifically, as in the Vernal and Autumnal Crocus. This circumstance is one of the wonders of creation, little noticed, because a common occurrence; yet ought not to be overlooked on account of its being familiar, since it would be as difficult to be explained as the most stupendous phenomenon in nature."

"Say, what impels, amidst surrounding snow Conceal'd, the Crocus' flamy bud to glow? Say; what retards, amidst the summer's blaze, Th' Autumnal bulb, till pale, declining days? The God of Seasons, whose pervading power Controls the sun, or sheds the fleecy shower:—He bids each flower his quick'ning word obey, Or to each lingering bloom enjoins delay."

ORDER LXXXVII. ORCHIDEÆ.

1. NEOTTIA.

1. N. SPIRALIS. Ladies' Traces. August—September. 4

On the lawn at Bramham Park. In Lord Feversham's Park at Helmsley. Near the lime kilns at Kippax. On the moor at Ganthorpe, a mile and a half from Castle Howard. Warmsworth, near Doncaster. Near Copgrove.

2. LISTERA.

1. L. OVATA. Common Twayblade. June. 4

In groves, woods, meadows and pastures, frequent.

A variety, with three or four leaves on the stem, in Black plantation, near Richmond.

2. L. CORDATA. Heart-leaved Mountain Twayblade. July—August. 24

On the side of Ingleborough. On Seamer moor, near Scarbro'. On Rumbald's moor. On a moor called Swill hill, four miles north of Halifax. Discovered in 1834, in the greatest abundance, in a fir plantation four miles east of York, a situation very dissimilar to any of the others; it flowers in this station from early in May to July. Broats plantation, adjoining Terrington carr. On the moors near Hambleton. On the race-ground, Scarbro'. Moor near Free-burgh hill, between Whitby and Guisborough, near Almonbury. Among the heath on Hornby hills. Yearsley moor, near Coxwold. Near the waterfall at Lord Grantley's lakes on Sawley moor. Downholme moor and Black plantation, near Richmond. Brimham rocks. West side of Ingleborough. On the north side of Pennigent.

3. L. NIDUS AVIS. Bird's Nest. May-June. 4

In the Ray wood and Thistle wood, near Castle Howard. Hildenley wood, near Malton. Woods at Bramham. Woods about Wetherby. Coneysthorpe banks, Castle Howard. On the south side of Round Howe, near Richmond, on clayey soil. Gibbets and Goldsbrough woods, near Knaresbro'. Hedges near Ingleton. Thorp Arch woods. Mackershaw and Studley woods, and Laver banks, near Ripon. Woods near Helmsley. Mr. Tatham's wood, near Ingleton. Mulgrave woods, near Whitby.

On Hudspope-head, Teesdale. Aislaby low moor, near Whitby.

3. EPIPACTIS.

- 1. E. LATIFOLIA. Broad-leaved Helleborine. August—September. 4.

 Knavesmire wood, near York. Ray wood and Coneysthorpe banks, near Castle Howard. Huddleston quarry, near Sherburn. Near Scarbro'. Banks of the Wharfe. Thorp Arch woods, near Tadcaster. Woods near Wetherby. Bingley woods, half a mile above the bridge. Beckdale, Helmsley, Overton wood, and Crompton's cover, near York. Near Doncaster. Fixby Park, near Huddersfield.
- 2. E. PALUSTRIS. Marsh Helleborine. July—August. 24

 Heslington fields, and brick-ponds on Hob moor, near York. Bogg
 Carr field, near the Sulphur Well, Knaresbro'. Buttercrambe moor,
 near York. Beckdale. Helmsley. In the marshy fields near Skeeby
 mill, Richmond. Very abundant in pastures and meadows near
 Ingleton. Near Doncaster. Newton dale, near Pickering.
- 3. E. ENSIFOLIA. Narrow-leaved White Helleborine. June. 24
 In Helks wood, near Ingleton. In a wood near Tadcaster. In a wood called Collier hagg, at Helmsley.
- 4. E. RUBRA. Purple Helleborine. June—July. 24

 On the slope of the hill above the Ebbing and Flowing Well, near Settle. In Stackhouse borrings, near Settle. At Gordale scarr, much more common than E. LATIFOLIA.

4. ORCHIS.

1. O. MASCULA. Early Purple Orchis. April—May. \mathcal{Y} In moist meadows and pastures, common.

2. O. MORIO. Green-winged Meadow Orchis. May—June. 24
Field beyond Hob moor and side of Askham bogs, near York. Escrick woods, Thorp Arch. Rivers bank top. Hovingham, and many other places.

A pure white variety is found near York, near Doncaster, Settle, &c.

3. O. USTULATA. Chocolate Tipp'd Orchis. May-June. 2

In moist meadows on the banks of the Ouse, near York, abundant. Hovingham. Thorp Arch. About Woodend, near Thirsk, abundant. Near Kippax. Westfield, near Richmond. Leeds. Coxwold. (Near Ripon. B. G.) Abundant in Wensleydale. Field near Swinethwaite.

- 4. O. LATIFOLIA. Marsh Palmate Orchis. May—June. 24
 In marshes and moist meadows, very common.
- 5. O. MACULATA. Spotted Palmate Orchis. June—July. 4
 Common almost everywhere.
- 6. O. Pyramidalis. Pyramidal Orchis. July—August. 21
 On grassy banks by road sides on limestone. Near Tadcaster. Wetherby. Near Roche Abbey. Boggy ground beyond the spa, Scarbro'. Wentbridge. Coneysthorpe banks, near Castle Howard. Near Helmsley. I have found a beautiful white variety near Wetherby. Ripon, very common. (Wensleydale. B. G.) Near

5. GYMNADENIA.

1. G. CONOPSEA. Aromatic Palmate Orchis. June. 2

Tadcaster. Thorp Arch. Halifax. Clifton ings and Heslington fields, near York, in abundance. Beckdale. Helmsley. A large variety, very fetid, is found in Clifton ings. It likewise occurs very sparingly in Heslington fields. Fields at Ganthorpe, near Castle Howard. On the north side of the Round Howe, near Richmond, abundant. Banks of the Esk, near Whitby. Newton dale, near Pickering.

Langcliffe. Hovingham. Near Rotherham. Lime hills, Kippax.

6. HABENARIA.

1. H. BIFOLIA. Butterfly Orchis. July. 24

Stockton forest. Whelldrake lane, &c. near York. Manor vale, Kirkby. Hookstone craggs, Knaresbro'. Thorp Arch. Hildenley, near Malton. Near Terrington carr, Richmond. Egton, near Whitby.

2. H. ALBIDA. White Cluster-rooted Orchis. June. 2

In the tarn field, Giggleswick. Also in a field called Brockhole, near Settle. Near Winch bridge and Wey sike, Teesdale. Dallow gill. Whitfell gill, near Askrigg. Very abundant in a field at Little bank, near Settle. Helks wood, near Ingleton. Hole of Horcum, and in Newton dale, seven miles north of Pickering. Heathy moors above Hawnby, six miles north west from Helmsley.

3. H. VIRIDIS. Frog Orchis. June—July. 4

Clifton ings, Heslington fields, &c. near York. Behind the Temple, Hovingham. Manor vale, Kirkby. Arncliffe wood, near Mount Grace. Welburn moor and in Ganthorpe cow pasture, both near Castle Howard. Near Winch bridge, Teesdale. Round Howe, near Richmond. Near Hildenley. Near Halifax.

7. OPHRYS.

1. O. MUSCIFERA. Fly Orchis. June-July. 4

Huddleston quarry, near Sherburn. 'Dowthwaite dale, near Kirkby Moorside. Hildenley wood, near Malton. Goldsborough woods. East side of Belmonde wood, near Knaresbro'; likewise in a wood above the Dripping Well. Several places at Thorp Arch. Wetherby. Woody bank on the road from Old Byland to Rievaulx. Woods at Studley. In Mr. Bland's wood, near the entrance from Kippax. About Abberford, abundant. Ward's field, near Copgrove. Grassington wood, Wharfedale. About Roche Abbey. Helmsley. Cawklees wood, two miles from Hovingham. Near Bolton Hall, Wensleydale. Near Settle, sparingly. About Hessle. Kirkby Moorside.

2. O. APIFERA. Bee Orchis. July. 4

Huddleston quarry. Fields near Gargrave. Hill north side of the Abbey mill, Knaresbro'. Parlington and about Abberford. Fields south of Thorp Arch. Near Rievaulx Abbey. Pastures at Fountain's Abbey. Studley woods. Hildenley stone quarry. Laver banks, near Ripon. Kippax. Near Copgrove. In a meadow near Eshton Hall. Hipswell cliffs, abundant. Ellershaw, near Wensley. Warmsworth cliffs and Brodsworth wood, near Doncaster. In the vale of Pickering. Wensleydale. Birtwhistle rocks, near Skipton.

The wonderful resemblance of this flower to the humble-bee, to which the following stanza alludes, attracts general admiration in a greater degree than most of its interesting congeners.

"Perhaps his fragrant load may bind His limbs; we'll set the captive free; I sought the living bee to find, And found the picture of a bee."

3. O. ARANIFERA. Spider Orchis. April. 4

Dry pastures about Bramham and Tadcaster. Huddleston quarry. Parlington. Abberford.

8. MALAXIS.

1. M. PALUDOSA. Bog Orchis. July. 4

On Sharnbury rig, above Middleton, in Teesdale.

9. CYPRIPEDIUM.

1. C. calceolus. Ladies' Slipper. June. 4

Beckdale, ascending the hill, near Helmsley, 1833. The Rev. W. Hinckes procured specimens from this locality in 1831, 32 and 34. I likewise saw it growing there in 1833, sparingly. At the south end of Bilsdale. It is still found, but very rare, in the woods about Kettlewell; two specimens were found in 1835.

I found flowering plants of it in Castle Eden Dean, in the county of Durham, May, 1837.

ORDER LXXXVIII. MELANTHACEÆ.

1. COLCHICUM.

1. C. AUTUMNALE. Meadow-saffron. September—October. 2

Clifton ings, Fulford ings, &c. near York. Banks of the Nidd, near Knaresbro'. Abberford. Collingham. Kiddal lane. Thorp Arch. Newby Park. Ribstone Park. Newton. Skip bridge. South Dalton. Ripon. Thirkleby. Kippax. Ledston. Copgrove. Apperley bridge. Between Clapham and Ingleton. Near Doncaster and at Roche Abbey.

2. TOFIELDIA.

1. T. PALUSTRIS. Marsh Asphodel. August. 4

On the Yorkshire as well as the Durham side of the Tees, above Middleton, in abundance.

Named by Hudson after Mr. Tofield, an eminent Botanist, of Doncaster. $\it Spharia\ Tofieldia$ is parasitic on its leaves.

ORDER LXXXIX. AMARYLLIDEÆ.

1. GALANTHUS.

1. G. NIVALIS. Snowdrop. February. 4

Fields at Heworth and Fulford, near York. Thornaby, near Thirsk. Banks of the Skell, near Ripon. Mackershaw woods. Banks of the Ribble, near Settle; and below the village of Giggleswick, not near any house. Ray wood, Castle Howard. Pastures at Kexby, near York. Cromwell Bottom wood, in Southowram, two miles from Halifax.

2. NARCISSUS.

1. N. BIFLORUS. Pale Narcissus. April—May. 4

In a field, in which is a stone quarry, on the left of the high road to Aske from Richmond. At Thornborough, near Thirsk. Near Rotherham. Near Hornsey Church. Near Ripon. Meadows at Sowerby, and Warley, near Halifax; naturalized.

2. N. PSEUDO-NARCISSUS. Daffodil. March-April. 24

In wet pastures and woods at Thorp Arch. Stillington. Galfag moor, near Ripon. On the banks of the Derwent at Kirkham, Elvington, &c. In Rawdon cragg, near Apperley bridge. Near Doncaster. Roche Abbey. Goadland, between Pickering and Whitby. Woods near Halifax, common.

The larva of Medoron clavipes feeds on the bulbs of this species.

3. N. POETICUS. Poetic Narcissus.

Naturalized in a field near Bentley, Doncaster, but certainly not wild. In Pickering castle yard the same.

ORDER XC. LILIACEÆ.

1. FRITILLARIA.

1. F. MELEAGRIS. Chequered Tulip. April. 4

Said to have been found very sparingly in the meadows between Tadcaster and Newton Kyme.

An interesting Spring flower, many beautiful varieties of which decorate our gardens; it will grow well in any soil and requires no care.

2. TULIPA.

1. T. SYLVESTRIS. Wild Tulip.

In a field between Hexthorpe and Sprotbro' broats, on the banks of the river Don; covering a considerable space, but flowering only sparingly.

The expensive varieties cultivated with such care by Florists, are not this species, but Tulipa Gesneriana, a native of the Levant.

However much a bed of these gaudy flowers may dazzle the beholder, both by collective and individual beauty, they scarcely exceed in elegance our simple native, thus improved by Montgomery:—

"Here lies a bulb, the child of earth, Buried alive beneath the clod; Ere long to spring, by second birth, A new and nobler work of God.

'Tis said, that microscopic power Might through its swaddling folds descry The infant image of the flower, Too exquisite to meet the eye.

This, vernal suns and rains will swell, Till from its dark abode it peep, Like Venus rising from her shell, Amidst the spring-tide of the deep.

Three shapely leaves will first unfold, Then on a smooth elastic stem, The verdant bud shall turn to gold, And open in a diadem.

Not one of Flora's brilliant race, A form more perfect can display,— Art could not feign more simple grace, Nor Nature take one tint away."

ORDER XCI. ASPHODELEÆ.

1. ALLIUM.

1. A. ARENARIUM. Sand Garlick. July. 4

Heslington fields, and by the church, Fulford, near York. Field above the White craggs, Thorp Arch. In the lane from Cover bridge to East Witton. In a field called Pitcroft, near Ripon. Croft fields, Coneysthorpe. Skipton bridge, near Thirsk. Near the Manor Garth, Kippax. Wetherby. (Near Ripon. Leeds. Middle of Mile island, Settle. Near the Dun Horse, Tingleton. Near Knaresbro', plentiful. From Copgrove to Newby. B. G.)

2. A. CARINATUM. Mountain Garlick. July. 2

Heslington fields, near York. About Knaresbro'. At Weathercoat cave. Ingleton. (Near Malham tarn and Attermine cave, near Settle. Rocks at Coniston and Kilnsey. B. G.)

3. A. OLERACEUM. Streaked Field Garlick. July. 24

Fulford ings, near York. Wetherby. Near the rookery, at Eastby. In the west field, near Richmond. Hovingham moor. Woods at Newburgh, near Coxwold. About Leeds. Knaresbro'. Clifton ings. Jerveaux Abbey. Fields near Copgrove. Near Ripon. Holdgate. In great abundance on the hills above Settle.

4. A. VINEALE. Crow Garlick. July. 4

Fulford ings and Heslington fields, near York. By the road side going to the flint mills, Thorp Arch. In a hedge at Ganthorpe, near Castle Howard. Clifton ings, near York. Near Doncaster.

5. A. URSINUM. Ramsons. May. 4

In moist woods and hedges, frequent.

6. A. SCHÆNOPRASUM. Chives. June. 4

Meadows near Kirkby Moorside. B. G.

I have a very ample list of plants from Kirkby Moorside, kindly furnished me by by the Rev. Edmund Gray, but no mention is made of this plant.

2. ORNITHOGALUM.

1. O. LUTEUM. Yellow Star of Bethlehem. March—April. 4

In a little wood near the mill one mile east of Boston. Banks of the Skell, near Ripon. Pasture at St. Martin's, under an elm free, near the river at Richmond. In Cliff wood, near Peirse bridge. In the Oak cliffs, Crambe beck, near Castle Howard. Woods near Greta bridge and Brignall. Near Slitnam. Dunkirk wood, near Slenningford, five miles north of Ripon. Near Doncaster. St. Leonard's ings, at Elvington, seven miles east of York. Oxclose wood, three miles from Castle Howard. Near the mill at Cotherstone, four miles north west of Barnard Castle; and in several woods bordering Cotherstone fell. In a corner of the second field below St. Robert's well, Knaresbro'.

2. O. UMBELLATUM. Common Star of Bethlehem. April—May. 4

At the low end of the long flat by the foot path leading from Greenbald bridge to Knaresbro'. Half a mile from Thirsk, on the foot road to Carlton Miniot. In a field called Parson's fur, near Kippax. Meadows near Ripon. Terrington broats, two miles from Castle Howard.

3. O. NUTANS. Drooping Star of Bethlehem. May. 4

In the foot road from York to Heslington; probably naturalized.

3. SCILLA.

1. S. NUTANS. Hare-bell. Wild Hyacinth. May. 4

Road sides and hedges, abundant. With white flowers near Settle, and at Elvington, near York. Bentley, near Doncaster.

ORDER XCII. SMILACEÆ.

1. CONVALLARIA.

1. C. MAJALIS. Lily of the Valley. May. 4

Woods near Tadcaster. Thorp Arch. Wetherby. In the woods at Castle Howard. Lee bank, Shroggs, near Halifax. Helmsley. In a wood near Malham cove. Round Howe, near Richmond. Woods near Arncliffe, in profusion. Bolton woods. Rotherham. Roche Abbey. Near Settle. Woods in the vale of Todmorden, frequent.

As the emblem of purity it is peerless even in the garland of lovely May.

"Then the sweet Lily of the Vale In woodland dells is found, While whisp'ring winds its sweets exhale, And waft its fragrance round."

A little monitor presents her page
Of choice instruction, with her snowy bells,
The Lily of the Vale."

2. C. POLYGONATUM. Angular Solomon's Seal. May-June. 4

On the ledges of the limestone cliffs at Winskill, two miles north of Settle. Above Crow Nest wood, three miles north west of Settle. Also on the ledge of Giggleswick scarr, and various other places near Settle, always on limestone. Fountain's Abbey. Ingleborough. Helks wood and Sykes wood, near Ingleton.

3. C. MULTIFLORA. Common Solomon's Seal. May—June. 4

Studley woods. Banks of the Swale opposite Applegarth, near Richmond. In a very old hedge on the left side of the road between Calton and Ribstone. Newburgh woods, near Coxwold. Near the road side between Stockton and Stainton.

Father Gerard asserts, that "the roote of Solomon's Seale stamped while it is greene, and applied, taketh away in one night, or two at most, any bruse, blacke or blew spots, gotten by falls or women's wilfulness, in stumbling upon their hastie husband's fists, or such like.

2. PARIS.

1. P. QUADRIFOLIA. Herb Paris, or One Berry. May—June. 4

Very common in woods throughout the greatest part of the county. I have found it with 2, 3, 5, 6, 7, and 8 leaves.

3. TAMUS.

1. T. COMMUNIS. Black Bryony. June. 44
In hedges very common.

ORDER XCIII. BUTOMEÆ.

1. BUTOMUS.

1. B. umbellatus. Flowering Rush. June—August. μ

In the river Foss at York. In the mere, Scarbro'. Beck on the road to Easingwold, five miles from York. Slingsby carr. In the river Derwent at Kirkham. In the Leeds and Liverpool Canal under Birch wood in Idle, and near Windhill. Very abundant in the same canal at Gargrave. Near Doncaster, sparingly. In ditches near Hull. Beverley.

One of our most beautiful aquatic plants; will grow well in a large pot filled with water.

ORDER XCIV. JUNCEÆ.

1. JUNCUS.

1. J. GLAUCUS. Hard Rush. July. 24

On moist waste ground, by road sides. Near Eske Hall. Brick ponds on Hob moor, and various other places near York.

Horizontal and transverse sections afford beautiful objects for the microscope. Wicks for rushlights are made from the stems of this species.

- 3. J. Effusus. Soft Rush. July. 4

 In wet pastures and boggy places. On Buttercrambe moor, Hob moor brick ponds, and other places near York. In Raby Park.
- 4. J. squarrosus. Goose Corn. June—August.

 Ω On peaty moors, common.
- J. COMPRESSUS. Round-fruited Rush. July—August. 4
 Moist fields, common.
- 6. J. Bufonius. Toad Rush. July—August. \mathcal{U} In moist sandy peat, common.
 - β. On Stockton forest.
- 7. J. Uliginosus. Little Bulbous Rush. June—July. $\mathcal U$ In moist sandy peat.
 - β . Common on moors near Sheffield.
- 8. J. SUBVERTICILLATUS. Whorl-headed Rush. July—August. 4

 Leckby carr. Terrington carr.
- 9. J. Acutiflorus. Sharp-flowered Jointed Rush. June—July. 24
 Near the High force, Teesdale. Near York, common.
- 10. J. LAMPOCARPUS. Shining-fruited Jointed Rush. July—August. 4
 In watery places, frequent.
- 11. J. POLYCEPHALUS. Many-headed Jointed Rush. June. 4.

 Near the High force, Teesdale.

Specimens of this rare plant, gathered at the above station, are in the rich herbarium of J. Backhouse, jun. Esq.

2. LUCIOLA.

1. L. PILOSA. Hairy Wood-rush. March—April. 4

In shady woods. Beeley wood, near Sheffield. Castle Howard woods, frequent. Woods near Doncaster. Very common near Halifax.

The larva of Mythimna turca, (the Double Line,) feeds on it.

- 2. L. SYLVATICA. Great Wood-rush. May—June. 24

 In most moist rocky woods. Billy bank wood, and banks of the Swale at Eastby, near Richmond. Old Park wood, near Sheffield. In Teesdale. Castle Howard woods, very common. Near the summit of Ingleborough. Near Whitby. Woods at Halifax, in the utmost profusion.
- 3. L. CAMPESTRIS. Field Wood-rush. April—May. 4. In dry barren pastures, frequent.

4. L. CONGESTA. Many-headed Bog Wood-rush. June. 4

Moist turfy places. Stockton forest. Moor rigs, west of Middleton, Teesdale. Near Whitby. Woods near Halifax, Todmorden. &c.

3. NARTHECIUM.

1. N. ossifragum. Bog-asphodel. July—August. 24
In black turfy bogs, common.

DIVISION II. GLUMACEÆ.

ORDER XCV. CYPERACEÆ.

1. RHYNCHOSPORA.

1. R. Alba. White Beak-rush. July—August. 24

In spongy bogs. Blackstone edge. Leckby carr. Black moor, near Leeds. Thorne moor. (Near Richmond, on the red marl. B.G.) Piercy's moor, and other places near Castle Howard.

2. SCHÆNUS.

1. S. NIGRICANS. Black Bog-rush. June. 21

In a marsh near Skeeby mill, Richmond. (Fields half way between Long Preston and Swindon. B. G). In a bog above the village of Austwick, common.

3. SCIRPUS.

1. S. Cæspitotus. (eleocharis cæspitosa, Link.) Scaly-stalked Club-rush. July. ${\cal U}$

Eccleshill, and other high moors near Bradford. Abundant in boggy places on most of the high parts of Yorkshire.

2. S. pauciflorus. (eleocharis pauciflora, Link.) Chocolate-headed Club-rush. August. $\mathcal U$

High moors five miles west of Sheffield. Near Richmond. Near Giggleswick. Houghton moor, near Newbald. Marshes near Beverley. On a moor north west of the beacon, Richmond. Sleights moor, near Pickering.

3. S. FLUITANS. (ELEOCHARIS FLUITANS, Hook.) Floating Club-rush. June—July. $\mathcal U$

Potteric carr, near Doncaster. Dringhouses moor, near York. In ditches near Cottingham and Hull. Large pond on Downholme moor, near Richmond.

4. S. LACUSTRIS. Bull-rush. July-August. 4

In the Foss at York. Eshton tarn, near Gargrave. Buttercrambe moor. Carrs near Doncaster. Scarbro' meer.

Bottoms of chairs are commonly made of this rush; it is likewise used extensively in filling up the seams between the staves of casks.

- 5. S. Setaceus. Bristle-stalked Club-rush. July—August. ①
 In watery places, common.
- 6. S. caricinus. (blysmus compressus, Panz.) Compressed Club-rush. July. $\mathcal U$

Side of the brook running from Malham tarn to the Cove. Near Helks wood, Ingleton. Cowside, near Settle.

7. S. MARITIMUS. Salt-marsh Club-rush. July—August. 4

Marshes at the mouth of the Tees, at Coatham. On the banks of the Esk, near Whitby.

8. S. SYLVATICUS. Wood Club-rush. June-July. 4

Marshy ground near Sedbury. Richmond. Between Bradford and Shipley. Banks of the Ure, near Aldwark bridge. Leeds and Addle. Clifton ings, near York, and on the banks of the Ouse. Egton bridge and Ruswarpe mill dam. Banks of the Derwent. North Dean, near Halifax.

4. ELEOCHARIS.

- E. PALUSTRIS. Creeping Spike-rush. June—July.

 In stagnant ponds and pools of water, frequent.
- 2. E. MULTICAULIS. Many-stalked Spike-rush. June.

 Sawley moor, near Rinon. (Boggy places on the moor ne

Sawley moor, near Ripon. (Boggy places on the moor near Brimham rocks. Houghton moor, near Newbald. B. G.) Piercy's moor, a mile and a half from Castle Howard.

3. E. Acicularis. Least Spike-rush. August. 4

Wet sandy places. Clifford moor, near Thorp Arch. Stockton forest. Terrington carr. Woodhouse moor, near Pocklington. Strensall moor and Dunnington common, near York.

5. ERIOPHORUM.

1. E. vaginatum. Hare's-tail Cotton-grass. April—May. \mathcal{V}

On high barren moors. Cronkley fell. (Richmond. Black moor, near Leeds. Heath north west of Terrington carr, and on Black Bird moor, both near Castle Howard. Tanfield carr. Bog in the Ox close, near Ripon. B. G.) Near Beverley. Moors between Hambleton and Helmsley. Moors near Gearstones. On Cockit moss and Helleth moss, near Settle. At the foot of Pennigent hill.

2. E. POLYSTACHION. Broad-leaved Cotton-grass. April. 4

In boggy places on moors. Stockton, near York. Malham tarn. In marshy pastures near Scotton. Moors above Knaresbro' and Harrogate. Whey sike, Teesdale. Copgrove. Bogs and wet meadows near Beverley. Gormire at Sutton under Whitsuncliffe. Near Kirkham. Near Hildenley.

- 3. E. Pubescens. Downy-stalked Cotton-grass. April—May. 4.

 At Skeeby mill, near Richmond. Aysgarth, Wensleydale. Bagby moor, near Thirsk.
- E. ANGUSTIFOLIUM. Common Cotton-grass. April.
 —
 Crooks moor, near Sheffield. In great abundance in the middle of Cockit moss, three miles west of Settle. Terrington carr. Carrs near Doncaster. Askham bogs.

6. CLADIUM.

1. C. Mariscus. Prickly Twig-rush. June. 4

Askham bogs and Buttercrambe moor, near York. Terrington carr. (Near Knaresbro', in wet places near the brook towards Newby; also in Mr. Duncombe's low grounds, abundant. B. G.)
In a ditch on the road from Doncaster to the decoy.

7. KOBRESIA.

1. K. CARICINA. Compound-headed Kobresia. August. 24
On Cronkley fell and Widdy bank, Teesdale.

8. CAREX.

Spike solitary simple.

- 1. C. DIOICA. Separate-headed Carex. May—June. 4

 Potteric carr, near Doncaster. Teesdale. Near Ripon. Low side of Kilburn thicket, near Coxwold. Near Copgrove. Near Leeds.
- C. PULICARIS. Flea Carex. June. 4
 Terrington carr. Near Beverley. Ogden clough, near Halifax. In Teesdale, frequent.
- 3. C. DAVALLIANA. Prickly Separate-headed Carex. May—June. 24
 Marshy grounds near Beverley, according to Teesdale.
- 4. C. PAUCIFLORA. Few-flowered Carex. June. 24

 Lilla Cross, and several places between Pickering and Whitby.

Spikes aggregate, each composed of barren and fertile bracteæ. Stigmas 2.

- C. STELLULATA. Little Prickly Carex. May—June.

 Abundant on Helleth moss, near Horton. Terrington carr. In bogs near Doncaster.
- 6. C. CURTA. White Carex. June. 4

 In a bog one mile from Low Harrogate, on the road to Ripon. Near the lakes on Sawley moor. Near Aldwark. Leckby carr. Terrington carr. Hutton moor. Bogs in the Ox close near Ripon. Downholme moor, near Richmond. West of Thoralby, Wensleydale. Sleights moor, near Whitby.
- C. ELONGATA. Elongated Carex. June.

 At Aldwark, near Boroughbridge. Near the river Don, below Sheffield.

- 8. C. ovalis. Oval-spiked Carex. June. 4. On Ganthorpe moor.
- 9. C. REMOTA. Remote Carex. May—June. 4

 Tilmire, Buttercrambe, and several other places near York. Near Beverley. Little bank, near Settle. Castle Howard. Rokeby Park. Woods near Halifax, frequent.
- 10. C. AXILLARIS. Clustered Carex. June. 4

 Ditches near Beverley. Near Copgrove. Edge of ponds near Ripon. Pond in Love lane, near Richmond. Newton dale, near Pickering.
- 11. C. ARENARIA. Sea Carex. June. 24
 Grove hill and low places near Hull bridge. In the salt marshes at the mouth of the Tees.
- C. INTERMEDIA. Soft Brown Carex. June. 4/2
 Buttercrambe carr, near York. Pond near Ganthorpe. Bog in Castle Howard Park.
- 13. C. divisa. Bracteated Marsh Carex. May—June. 24
 (In a meadow called Derricoats, near Hull. Near Copgrove. B. G.)
- C. MURICATA. Greater Prickly Carex. May—June. 4
 West Field pastures, near Richmond. Ganthorpe moor, near Castle Howard. Near Settle.
- 15. C. divulsa. Grey Carex. May. \mathcal{U} In the foot road from Richmond to Eastby.

The larva of Simyra venosa, (the Powdered Wainscot,) feeds upon the roots.

- 16. C. VULPINA. Great Compound Prickly Carex. July. 4

 Banks of the Derwent, near Kirkham. Newton dale, near Pickering.
 Thurnscoe, near Doncaster.
- 17. C. TERETIUSCULA. Lesser Panicled Carex. May. 4

 Askham bogs, near York. Arram carr, near Beverley. Terrington carr. Near Copgrove. Tanfield Hall carr. (Bogs in Fairfield woods, near Ripon. B. G.)

Barren and fertile bracteæ in separate spikes; the barren spike solitary. Involucral leaves membranous. Stigmas 3.

- 18. C. PANICULATA. Great Panicled Carex. July. 4

 In wet pastures near Beverley. In Widdop, near Heptonstall.

 Near Sedbergh. Terrington carr. Whitsuncliffe, near Thirsk.

 Newton dale, near Pickering.
- C. DIGITATA. Fingered Carex. May—June. 24
 Thorp Arch woods. Mackershaw woods, near Ripon.

Barren and fertile bracteæ in separate spikes; the barren spike solitary, very rarely or occasionally more than one. Involucral leaves leafy, often sheathing,

20. C. Pendula. Great Pendulous Carex. May-June. 4

Marshy places near Ouseburn. Near Scarbro'. Monk-end wood, near Croft. Hackfall. Foot-road from Richmond to Eastby. Arncliffe wood. Cleveland. Clink bank, near Richmond. Banks of the Ribble, near Settle. Mulgrave woods. Sleights wood, near Whitby. Turner clough, near Ripponden.

- 21. C. STRIGOSA. Loose Pendulous Carex. April—May. 4

 Magdalene banks, Hackfall.
- 22. C. SYLVATICA. Pendulous Wood Carex. May—June. 4

 In woods on strong clayey soil. Woods at Rokeby. Wood near Tadcaster. Parker spring, near Sheffield. Wood near Skelton. York.
- 23. C. CAPILLARIS. Dwarf Capillary Carex. July—August. 24
 Cronkley fell and Widdy bank, Teesdale.
- 24. C. PSEUDO-CYPERUS. Bastard Cyperus Carex. July. *\mathcal{Y}\$
 Clifton ings, near York, sparingly. Dumble pit, near Beverley.
 Askham bogs. Strand, near Ouseburn. In a bog on the south side of the Ure at Ripon. Castle Howard.
- 25. C. LIMOSA. Green and Gold Carex. July. \(\frac{1}{2} \)
 In Terrington carr. Suett carr, near Sutton on the Forest. Tanfield Hall carr, near Ripon. Leckby carr.
- 26. C. PALLESCENS. Pale Carex. May—June. 4

 Moist pastures by the beck at Skeeby, near Richmond, abundant.
 Terrington carr. Leckby carr.
- 27. C. FLAVA. Yellow Carex. May—June. 4

 On a moor north west of the beacon, near Richmond. Very common near Settle. Willow garth, near Crambe beck.
- 28. C. ŒDERI. Œderian Carex. July. \mathcal{U} Near Ripon. Wet places near Beverley. In the foot-road to Colburn, near Richmond. Terrington carr. Gormire, near Sutton under Whitsuncliffe. Near Hebden bridge.
- 29. C. fulva. Tawny Carex. June—July.

 Hole of Horcum, between Pickering and Whitby. Copgrove.
 Beverley. Near Coxwold. Aysgarth force. Wood near Langeliffe,
 Settle. On a moor north west of the beacon, near Richmond.
- 30. C. EXTENSA. Long-bracteated Carex. June. \mathcal{Y} On the sand banks in Coatham marshes.
- 31. C. distans. Loose Carex. June. \mathcal{L} Edge of Giggleswick tarn.

- 32. C. BINERVIS. Green-ribbed Carex. June. 4.

 Middleton one Row. Sawley moor. Near Brimham rocks. Copgrove. Moors near Harrogate. Black Plantation and Ais-la-Beck, Richmond. Aislaby moor, near Whitby. Yearsley moor, five miles north east of Easingwold. Turner clough, near Ripponden. Ogden clough. &c.
- 33. C. PRÆCOX. Vernal Carex. April. 4
 On dry heaths and hillocks, frequent.
- 34. C. PILULIFERA. Round-headed Carex. April—May. 4

 In wet peaty places on moors. Moors near Harrogate. Downholme moor, near Richmond.
- 35. C. PANICEA. Pink-leaved Carex. May—June. 4

 Jordan dam, near Sheffield. Near the High force, Teesdale. Near Hull. Terrington carr. On Sneaton moor, two miles south of Whitby.
- 36. C. RECURVA. Glaucous Heath Carex. May—June. 4

 Near Tadcaster, common. Terrington carr.
- 37. C. CÆSPITOSA. Tufted Bog Carex. May—June. 4
 Woods at Langwith, near York, common. Woods near Sheffield.
 Barren and fertile bracteæ in separate spikes. Barren spikes 2 or more.
- 38. C. ACUTA. Slender-spiked Carex. May. 4

 Near Ripon and Copgrove. Banks of ditches near Beverley.
- 39. C. PALUDOSA. Lesser Common Carex. June. 4

 Castle Howard woods, and banks of the Derwent. Newton dale, near Pickering.
- 40. C. RIPARIA. Great Common Carex. April—May. 4 In watery places, frequent.
- 41. C. Vesicaria. Short-spiked Bladder Carex. May. 4

 In wet marshy places about Yafforth, near Northallerton. Near Sheffield. Beverley. Hull. Cottingham. Near Copgrove. Near Ripon. Angram wood, near Coxwold. In a pond at St. Trinien's, near Richmond. Near Settle. Gormire under Whitsuncliffe, near Thirsk. Banks of the Derwent. Randaymere, near Whitby.
- 42. C. AMPULLACEA. Slender-beaked Bottle Carex. May. 24
 Giggleswick tarn Wensleydale. Buttercrambe, near York. Near
 Scotton. Black Plantation. Seamer water, Wensleydale. Near
 Settle. Near Whitsuncliffe. Terrington carr. Newton dale, near
 Pickering.
- C. HIRTA. Hairy Carex. May—June.
 ¹
 ¹
 In wet woods and watery places, frequent.
 β. At Copgrove.
- 44. C. FILIFORMIS. Slender-leaved Carex. June. 24

 In all the watery marshes about Beverley, very common. In Leckby carr. Terrington carr.

The different species afford food to the following larvæ; Simyra venosa, (the Powdered Wainscot;) Leucania impura, (the Smoky Wainscot;) Erastria incana, (the Silver Hook.)

ORDER XCVI. GRAMINEÆ.

1. ROTTBOLLIA.

2. LOLIUM.

1. L. PERENNE. Rye-grass. June. 24

In meadows, pastures and waste ground, frequent.

A curious variety, with the spike flat and broad, found on the banks of the Foss.

- 2. L. TEMULENTUM. Bearded Darnel. July—August. 44
 Corn fields at Langwith, near York.
- L. ARVENSE. Annual Darnel. July.
 On fields near Ouseburn. Near Malton. About Ripon. Copgrove. Walkington fields, near Beverley. In the vale of Pickering. Near Whitby.

3. NARDUS.

N. STRICTA. Mat-grass. July. 24
 On barren sandy heaths and moors, frequent.

4. HORDEUM.

- H. MURINUM. Wall Barley. June—August.
 On walls and waste ground, frequent.
- 2. H. PRATENSE. Meadow Barley. June. 24
 Meadows near Ganthorpe.
- 3. H. MARITIMUM. Sea Barley. June—July. ⊙

 Coatham and Redcar, on the banks of the salt water ditches at the confluence of the Ouse and Trent.

5. ELYMUS.

E. ARENARIUS. Sea Lyme-grass. July. 4
 On the sandy sea shore at Redcar, Coatham, &c.

2. E. EUROPÆUS. Wood Lyme-grass. June. 4

In the woods at Rokeby. Very common in Cave Hole wood, near Settle. In the Eavs at Heptonstall. Stanley clough, near Todmorden. In a wood by the side of the Huddersfield canal. In a wood belonging to the Wade House farm, at Shelf, near Bradford. Old Park wood, near Sheffield. Thorp Arch woods. Woods at Castle Howard. Byland, near Coxwold. Hackfall. Hildenley wood, near Malton.

6. TRITICUM.

- 1. T. JUNCEUM. Sea Rushy Wheat-grass. July. 24
 Sand hills at Coatham and Redcar, abundant. (Red carr. B. G.)
- 2. T. REPENS. Creeping Wheat-grass. Couch-grass. May—Sept. 4. In waste and cultivated ground, very common.
- 3. T. CANINUM. Fibrous-rooted Wheat-grass. July. 24.
 Woods, banks and hedges. Roche Abbey, &c.
- T. LOLIACEUM. Dwarf Sea Wheat-grass. June—July. ⊙
 In a glen between Redcar and Marske, by the sea shore. On the old pier, Scarbro'.

7. PHALARIS.

- 1. P. CANARIENSIS. Canary-grass. June—August. ①
 On cultivated and waste ground, naturalized.
- P. ARUNDINACEA. Reed Canary-grass. July.

 Ditches, pools and margins of rivers. By the Ouse. By the side of
 the brook at Bradford. Thorp Arch.

8. PHLEUM.

1. P. PRATENSE. Cat's-tail-grass. Timothy-grass. June—October. 4
In the vale of York, common.

γ. Nodosum. Sheep pasture adjoining Hildenley wood.

9. ALOPECURUS.

- 1. A. PRATENSIS. Fox-tail-grass. May. 4
 In meadows and pastures everywhere.
- A. AGRESTIS. Slender Fox-tail-grass. July. ⊙
 In cultivated fields and by way sides. In corn fields about Richmond, frequent.
- 3. A. GENICULATUS. Jointed Fox-tail-grass. May. 4
 In wet meadows and pools.

10. MILIUM.

1. M. effusum. Millet-grass. June—July. ${\cal U}$ In moist shady places, frequent.

11. AGROSTIS.

- 2. A. CANINA. Brown Bent-grass. June—July. 4
 In damp boggy pastures.
- 3. A. SETACEA. Bristle-leaved Bent-grass. July—August. 4. (Walls on the moors above Ebberston Lodge, near Pickering. B. G.)
- 4. A. VULGARIS. Fine Bent-grass. July—August. 21
 In meadows and waste ground everywhere.
- A. Alba. Marsh Bent-grass. July—August. 4
 In moist meadows and pastures.
 - β. By the side of the brook at Shearbridge, near Bradford. In the carrs near Doncaster.

12. AIRA.

- A. AQUATICA. Water Hair-grass. May—June.

 —June.

 —June.
- A. FLEXUOSA. Wavy Mountain Hair-grass. July. 4
 In turfy and sandy places, frequent.
- 3. A. Præcox. Early Hair-grass. May—June. ①

 Roseberry Topping. Crooks moor, near Sheffield. Baildon, near Bradford. On the race-ground, Richmond. Carrs near Doncaster. Very common near Halifax.
- 4. A. CARYOPHYLLA. Silver Hair-grass. June—July. ⊙
 On barren sandy heaths, frequent.
- 5. A. CRISTATA. Crested Hair-grass. July—August. 24
 Sheep pasture adjoining Hildenley wood, near Malton.

13. HOLCUS.

- 1. H. LANATUS. Soft Meadow-grass. July—August. 4
 In meadows and pastures, abundant.
- 2. H. Mollis. Creeping Soft-grass. July. 24
 In pastures, hedges, &c.

3. H. AVENACEUS. (ARRHENATHERUM AVENACEUM. Beauv.) ELATIOR. Linn.) Oat-like Soft-grass. June—July. 2

In pastures and hedges, frequent.

A viviparous variety grew upon the edge of the mill dam at Bowling, near Bradford.

14. MELICA.

- 1. M. UNIFLORA. Common Melic-grass. May—June. \mathcal{U} Sides of woods and hedge banks, frequent.
- 2. M. NUTANS. Wood Melic-grass. June—July. 24 Woods at Thorp Arch. Mackershaw wood, near Ripon. Round Aysgarth force, Wensleydale. Wood at ar Tadcaster. Thirsk and Thirkleby. Howe, near Richmond. Heptonstall. Woods near Tadcaster. Byland wood, near Coxwold. Helks wood, near Ingleton. Doncaster. Woods above Settle.
- 3. M. CÆRULEA. Purple Melic-grass. August. \mathcal{I} In barren, sandy and boggy ground, frequent. In Crompton's wood and other places near York.

15. SESLERIA.

1. S. CÆRULEA. Blue Moor-grass. April—June.

At the Strid, Bolton Abbey. Ingleborough. Malham. On Giggleswick scarrs, and on all the limestone hills about Settle and Malham. On the banks of the Tees, abundant. Aysgarth force, Wensleydale.

16. GLYCERIA.

- 1. G. AQUATICA. Reedy Sweet-grass. July. In ditches and margins of running streams. Ditches near York. In the canal from Apperley bridge to Skipton. Ponds between Redcar and Marske. Ponds at Castle Howard. Roche Abbey. Carrs near Doncaster. Bolton beck, near Richmond.
- 2. G. FLUITANS. Floating Sweet-grass. June—August. In stagnant waters and slow streams, frequent.
- 3. G. DISTANS. Reflexed Sweet-grass. July—August. On sandy ground. York. Thorp Arch. On the banks of the Eske.
- 4. G. MARITIMA. Creeping Sea Sweet-grass. July—October. Banks of salt water ditches at Coatham and Redcar. On the banks of the Humber. Runswick bay.
- 5. G. PROCUMBENS. Procumbent Sea Sweet-grass. July—August. On the pier, Scarbro'. Runswick bay.

6. G. RIGIDA. Hard Sweet-grass. June—August. ⊙
On old walls near York. Kelcow, near Settle. Giggleswick scarr.
Baildon. Near Pickering. Castle bank, Richmond. Coneysthorpe.
Kirkham Abbey. Scarbro'.

17. POA.

- P. COMPRESSA. Flat-stalked Meadow-grass. June—September. 24
 Walls near York. Ferrybridge. Castle Howard. Coneysthorpe banks.
- 2. P. Alpina. Alpine Meadow-grass. July—August. 4. Limestone rocks on the north west of Ingleborough.
- 3. P. TRIVIALIS. Roughish Meadow-grass. June—October. 4. In moist meadows and pastures.
- 4. P. Pratensis. Smooth-stalked Meadow-grass. May—June. 4. In meadows and pastures.
 - γ. P. SUBCÆRULEA. Eng. Bot. 1004. Hills near Halifax, Heptonstall, &c. frequent.
- 5. P. Annual Meadow-grass.

 Everywhere.
- P. GLAUCA. Glaucous Meadow-grass. June—July.
 \(\frac{1}{2} \)
 On Ingleborough, on soil covering schistose rocks.
- 7. P. NEMORALIS. Wood Meadow-grass. June—July. 4. In several places near Ingleborough.

18. TRIODIA.

1. T. DECUMBENS. Heath-grass. July. 4

Near Cauldron Snout, Teesdale. Terrington carr.

19. BRIZA.

1. B. MEDIA. Quaking-grass. May—June. 44
In meadows and pastures, common.

20. DACTYLIS.

1. D. GLOMERATA. Cock's-foot-grass. June—August. 4

In meadows and shady places, common.

21. CYNOSURUS.

1. C. CRISTATUS. Crested Dog's-grass. June—July. 4. In dry pastures everywhere.

22. FESTUCA.

F. OVINA. Sheep's Fescue-grass. June.

 ¹

 ¹

 In dry open pastures.

- 2. F. VIVIPARA. Viviparous Fescue-grass. July. 4

 Attermine cave, a little above Settle. Ingleborough. Rye-loaf.

 Near Cauldron Snout, Teesdale, and most high mountains in

 Yorkshire.
- 3. F. DURIUSCULA. Hard Fescue-grass. June—July. $\mathcal U$ In pastures, waste ground and wood sides, frequent.
- 4. F. RUBRA. Creeping Fescue-grass. June. & Sand hills at Redcar, Coatham, &c. Runswick bay. Between Filey and Recton.
- F. CALAMARIA. Reed Fescue-grass. June—July.

 —July.

 —In open woods. Thorp Arch. Bingley. In the Eavs at Heptonstall. Stanley clough, near Todmorden.
- F. LOLIACEA. Spiked Fescue-grass. July—August. 2/
 Near York, not uncommon. Meadows near Ripon. Near Beverley.
 Meadows at Coxwold and Newburgh. Clink bank, Richmond.
 Halifax. Saltmarshe. Egton bridge.
- 7. F. pratensis. Meadow Fescue-grass. July—August. \mathcal{U} In moist meadows and pastures.
- 8. F. ELATIOR. Tall Fescue-grass. June—July. *\mathcal{I}\)
 Sides of woods and ditches. Near Selby. Between Howden and Market Weighton. Sleights mill. Near Sutton under Whitsuncliffe. Between Boroughbridge and Leckby carr.
- F. PINNATA. Spiked Heath Fescue-grass. July. 24
 Open fields and heaths. Bramham. Thorp Arch. Wetherby. Roche Abbey. Castle Howard. Coxwold. Ferrybridge. Doncaster. Farnham. Market Weighton.
- 10. F. BROMOIDES. Barren Fescue-grass. June.
 On walls and barren ground. On the Wolds. Ellershaw hill, near Ripon. Walls at Hackness, near Scarbro'. Hambleton hills. Sandy lanes near Hatton moor, two miles east of Ripon. Near Doncaster. Aislaby moor.
- F. MYURUS. Wall Fescue-grass. June—July.
 On walls and barren sandy ground. Near Leyburn, in the road to the limekilns.
- F. SYLVATICA. Slender Wood Fescue-grass. July. 2/
 In several of the Castle Howard woods. Walkington wood, near Beverley. Near York.

23. BROMUS.

- 2. B. MOLLIS. Soft Brome-grass. June. 3 In fields and pastures, common.
- 3. B. RACEMOSUS. Smooth Brome-grass. June. ⊙
 Near Ripon. In meadows and pastures. (Richmond Common. B. G.)
 In wet marshes near Beverley.

- 4. B. Arvensis. Taper Field Brome-grass. July. ⊙

 Corn fields, near Little Weighton, where it grows to the height of six feet. Near Coxwold.
- B. ERECTUS. Upright Perennial Brome-grass. July.
 \(\frac{1}{2} \)
 Loversall, near Doncaster. Near Sheffield. Malton fields, near the footpath leading to Hildenley.
- 6. B. ASPER. Hairy Wood Brome-grass. July—August. ⊙
 In moist woods and hedges, common.
- B. STERILIS. Barren Brome-grass. June—July. On old walls and waste ground, frequent.

24. AVENA.

- A. FATUA. Wild Oat. June—July. ①
 In corn fields. Kippax. Near Ripon. Wilden, near Coxwold. Castle Howard. Thorne moor. Richmond. Beverley. Near Whitby.
- 2. A. STRIGOSA. Bristle-pointed Oat. June—July. ⊙
 Said to grow in Yorkshire, in E. B.

Sir W. J. Hooker says, "common both in England and Scotland."

- 3. A. Pubescens. Downy Oat-grass. June. 4

 West field, near Richmond. Near Ripon. Coxwold. Copgrove, in dry lands.
- 4. A. PRATENSIS. Narrow-leaved Oat-grass. July. 24.
 In chalky and limestone pastures. Near Thorne.
- A. FLAVESCENS. Yellow Oat-grass. July.

 —
 I have found it in almost all soils and situations.

25. ARUNDO.

- 1. A. Phragmites. Reed. July—September. 24
 In ditches and wet places.
- 2. A. EPIGEJOS. Wood Reed. July. 4

 In shady ditches and moist woods. In the Shrogg, opposite the half-way house, Kidhall lane. Near Ripon. Near Sheffield. Helperby and Boroughbridge. Thirsk. Thurwell wood, Castle Howard. Coneysthorpe banks, about the middle of the wood, by a footpath.
- 3. A. CALAMAGROSTIS. Small Reed. June—July. 24

 Moist hedges, moors and old ponds. Askham bogs and Stockton, near York. Ripon. Hipswell Lodge. Copgrove. Castle Howard. Newburgh Park.
- 4. A. ARENARIA. Sea Mat-weed. July. \mathcal{U} On the sandy sea coast. Redcar and Coatham. On the Holderness coast.

ORDER XCVII. FILICES.

1. POLYPODIUM.

- 1. P. VULGARE. Common Polypody. August—October.
 On walls, shady banks, and trunks of old trees, frequent.
- 2. P. PHEGOPTERIS. Pale Mountain Polypody. June—August.

 Dry woods. Buttercrambe moor, near York, very common. Weathercoat cave, near Settle. On the Durham side of the Tees, above Middleton. Wensleydale. Bell hagg, one mile from Sheffield. Penhill. Gill on Bellerby moor, &c. Shibden dale, Ogden clough, &c. near Halifax. Rocky woods in the vale of Todmorden, frequent. Near Helmsley.
- 3. P. DRYOPTERIS. Tender Three-branched Polypody. June—July.

 In high situations in the West and North Ridings. Brimham rocks. Teesdale. Near Pickering. Near Whitby. Near Richmond. Woods near Halifax, frequent. Near Helmsley.
- 4. P. CALCAREUM. Rigid Three-branched Polypody. July—September.

 On mountainous heaths. Frequent on the hills about Settle.

 Several places in Gordale.

2. ASPIDIUM.

1. A. LONCHITIS. Rough Alpine Shield-fern. July—September.

On rocks in alpine situations. On the alpine hills above Langcliffe, two miles from Settle. On the rocks called Falcon clints, ten miles west of Middleton, in Teesdale.

2. A. THELYPTERIS. Marsh Shield-fern. July—September.

By the sides of ditches in marshy ground. Terrington carr. Askham bogs and Buttercrambe, near York. Near Copgrove. Near Doncaster. Near Hovingham. Near Settle.

3. A. OREOPTERIS. Heath Shield-fern. July-September.

On heaths and in dry woods. Woods at Escrick, near York. Wheeldale and Beck hole, near Whitby. Near Richmond. North Dean wood, and many other situations in the neighbourhood of Halifax. Near Helmsley.

- 4. A. FILIX MAS. Male Shield-fern. June—September.
 In woods, ditches, and bank sides, frequent.
- 5. A. CRISTATUM. Crested Shield-fern. August—September.
 On Plumpton rocks, near Knaresbro'.

6. A. ACULEATUM. Prickly Shield-fern. July.

Damp woods and wet shady banks. Near Settle. In the woods at Studley. Near Richmond.

7. A. Angulare. Angular-leaved Shield-fern. July.

Near Elland. (Near Richmond. Mr. J. Tatham, in Francis's British Ferns.)

8. A. RIGIDUM. Rigid Shield-fern. August.

On the Attermine rocks, near Settle. (Mr. J. Tatham.) (On Ingleborough, near the foot of the hill. Rev. W. T. Bree, in Francis's British Ferns.)

9. A. LOBATUM. Close-leaved Prickly Shield-fern. July-September.

On moist shady hedge banks. Common in woods near Doncaster. Near Bilton. York. Settle. Downholme Park. Gill, near Richmond. Woods between Scawton and Rievaulx. Woods near Halifax, Heptonstall, Todmorden, &c. Near Helmsley.

10. A. SPINULOSUM. Prickly-toothed Shield-fern. June.

In marshy places. In the wood at Buttercrambe, near York. In the carrs near Doncaster. Near Richmond. Ingleborough.

11. A. DILATATUM. Broad Sharp-toothed Shield-fern. July—Sep.

In woods and plantations near Castle Howard. Near Settle. Near Halifax, very common. Near Helmsley and near York, in many places.

12. A. FILIX FÆMINA. Female Shield-fern. June—September.

On wet shady banks, frequent.

3. CYSTEA.

1. C. fragilis. Brittle Bladder-fern. July-September.

On a bridge in Castle Howard Park. Near Settle. Malham. Near Rievaulx Abbey, Helmsley. Abundant at Egglestone bridge, on the banks of the Greta. Dropping well, Knaresbro'. Red scarr. Applegarth. In a deep clough at the head of Shibden dale, near Halifax, sparingly.

2. C. DENTATA. Toothed Bladder-fern. July.

Frequent on the hills above Settle. Rocks at Cauldron Snout.

3. C. ANGUSTATA. Deep-cut Mountain Bladder-fern. June—August.

On shady rocks and old walls. About Settle. Near Aysgarth bridge, Wensleydale. Alpine rocks at Gordale.

4. C. REGIA. Laciniated Bladder-fern. July. 4

At the top of Byland wood, near Coxwold. Rocks at the Dropping well, Knaresbro'. (Francis's B. F.)

4. ASPLENIUM.

1. A. TRICHOMANES. Common Maidenhair Spleenwort. July—Dec.

On shady rocks and old walls. Frequent in the West and North Ridings. Walls on the east side of Raywood, Castle Howard. Jack Daw cragg, near Tadcaster. Settle.

A variety, with the fronds divided, grows on the rocks at Whitsuncliffe, near Thirsk.

 $\dot{\text{Var.}}$ β . T. Foliis Eleganter incisis. (Dill, in Raii. Syn. 120.) Kant clough, near Burnley, half a mile from the division of the counties of York. and Lanc. (Mr. S. Gibson.)

A. VIRIDE. Green Maidenhair Spleenwort. June—September.
 On damp shady rocks. Ingleborough. Many places in Teesdale. Widdale fell, Wensleydale. Gordale. Ais-la-beck. On Reeth moor, in Swaledale. Hill gill, near the side of the brook. Ogden clough, near Halifax.

Var. β. A. TRICHOMANES RAMOSUM. (Linn. Sp. Pl. 1541.) Near Settle. In Ogden clough.

- 3. A. MARINUM. Sea Spleenwort. July—October. Near Scarbro'. (Mr. S. Gibson.)
- 4. A. RUTA MURARIA. Wall-rue. June—October.
 On dry as well as moist old walls and rocks, frequent.
- A. ADIANTUM NIGRUM. Black Maidenhair. June—October.
 On rocks and old walls. Castle Howard. Mr. Copsie's wood, Stockton forest. Old walls on the road from Halifax to Luddenden foot. Knaresbro'. Clink bank, near Richmond. Applegarth.

5. SCOLOPENDRIUM.

1. S. VULGARE. Heart's-tongue. July-September.

Moist shady banks, old walls, &c. Rare near York, but frequent in some parts of the county.

Var. Y. Frequent.

6. GRAMMITIS.

1. G. CETERACH. Rough Spleenwort. June—October.

On rocks and old walls. On rocks behind Malham water-house; also in the road between there and Trenhouse, five miles east of Settle. On an old wall three-quarters of a mile north east of Settle. On the old garden walls of Kirklees Park, abundant.

7. BLECHNUM.

1. B. BOREALE. Hard-fern. July-September.

On heathy moors and shady hedge bottoms, frequent.

8. PTERIS.

- 1. P. AQUILINA. Common Brakes. July—September.

 Barren heaths, sandy lanes and woods, frequent.
- P. CRISPA. Curled, or Rock, Brakes. June—September.
 In stony mountainous situations. Cronkley scarr, &c. Teesdale. Sides of Ingleborough hill. Settle, frequent. On Penhill, near the slate quarry.

9. WOODSIA.

1. W. ILVENSIS. Oblong Woodsia. June—September.

On alpine rocks. On Falcon clints, a little below Cauldron Snout. On the Durham side of the Tees, ten miles west of Middleton. Near Richmond. (Francis's B. F.)

10. HYMENOPHYLLUM.

- 1. H. TUNBRIDGENSE. Tunbridge Filmy-fern. July—August.

 Eskdale side, near Whitby. On Rake Hey common, near Todmorden.
- H. WILSONI. July—August.
 Turner clough, in Rishworth.

11. OSMUNDA.

1. O. REGALIS. Osmund-royal, Royal-fern. June-July.

In wet close peaty ground. In Askham bogs, near which place it may frequently be found with the fronds from four to five feet high. Langwith and Wheldrake lanes, near York, very frequent. Ayton forge, near Scarbro'. Beck hole, near Whitby. Near the Hay Park wind-mill, Knaresbro'.

12. BOTRYCHIUM.

1. B. LUNARIA. Moonwort. June-July.

In pastures and meadows. Fields at Ganthorpe, near Castle Howard. At Airyholme, near Hovingham. Near Settle. Above the wood bridge that crosses the Tees to Lower Cronkley, and at Moor riggs, in Teesdale. Cotherstone fell. On the Hambleton hills, frequent. Near Whitby. Halves Farm pastures, near Knaresbro'. Near Richmond. Near Halifax.

13. OPHIOGLOSSUM.

1. O. VULGATUM. Adder's-tongue. June-July.

In moist pastures. Clifton ings and field at Mary-gate, near York. Frequent in the fields about Ganthorpe, a mile and a half from Castle Howard. Near Settle, abundant. Near Pickering. Near Whitby. Scarbro'. Thirsk. Belmont, near Knaresbro'. Aske wood, near Richmond.

LYCOPODIACEÆ.

14. LYCOPODIUM.

- 1. L. CLAVATUM. Common Club-moss. July—September.
 On moors in the West and North Ridings, frequent.
- 2, L. SELAGINOIDES. Little Prickly Club-moss. June-October.

Dry heathy commons. On both sides the sandy road from Thorp's wood corner, on Stockton forest, to the Malton road, five miles from York. On a part of the moor opposite the poor-houses in Wheldrake lane, four miles east of York. On an island just above the bridge that crosses the Tees to Lower Cronkley. Various places near Settle. In a marshy place on the moor north west of the beacon, near Richmond. On the top of Whitsuncliffe, near Thirsk.

3. L. INUNDATUM. Marsh Club-moss. July—August.

Wet turfy heaths or sandy road sides. In a sand pit on the Malton road four miles and a half from York. In great abundance near

road, four miles and a half from York. In great abundance near the footpath from the sand pit to Thorp's wood, on Stockton forest. Norland moor, near Halifax.

4. L. SELAGO. Fir Club-moss. June-August.

On moist mountainous heaths. Near Settle, abundant. Various places in Teesdale, above Falcon clints, &c. On Penhill. Moors near Halifax, Todmorden, &c.

5. L. ALPINUM. Alpine Club-moss. July-October.

On the tops of stony mountains. Above Falcon clints and Cronkley fell, in Teesdale. Very abundant on the side of Ingleborough, near the summit. Aislaby low moor, near Whitby. On Sowerby, Wadsworth, and Midgley moors, frequent.

EQUISETACEÆ.

15. EQUISETUM.

1. E. SYLVATICUM. Branched Wood Horsetail. April—May.

Moist woods. About Castle Howard, frequent. Goadland dale, near Whitby. Near Green Hammerton. Settle. Richmond. Leeds, &c. By the brook at Hesketh grange, near Boltby. Arncliffe woods.

2. E. FLUVIATILE. Great Water Horsetail. April.

In the Roche, at Roche Abbey. By the road side between Thornbrough and Upsall. Wood on Wasse bank, on the road to Helmsley. Arneliffe wood.

3. E. ARVENSE. Corn Horsetail. March—April.

Moist meadows and corn fields, too frequent.

- 4. E. PALUSTRIS. Marsh Horsetail. June—July.
 Wet places, not unfrequent.
- E. LIMOSUM. Smooth Naked Horsetail. June—July.
 Hob moor brick-ponds, near York. At the bottom of Wensley-dale.
- 6. E. HYEMALE. Rough Horsetail Shave-grass. July—August.

 In marshy places. By the side of the river Derwent, three miles from Castle Howard. From Wakefield to Pontefract. Goadland dale, near Whitby. Hackness, near Scarbro'. Near Halifax.
- E. VARIEGATUM. Variegated Rough Horsetail. May.
 About Winch bridge, and near the Tees, frequent.

MARSILIACEÆ.

16. PILULARIA.

1. P. GLOBULIFERA. Pillwort. June—September.
On Stockton forest, near Copsie's wood. Near Richmond.

MUSCI.

DIVISION I. SCHISTOCARPI.

1. ANDRÆA.

- A. RUPESTRIS. Hooker in Linn. Trans. vol. 10, p. 391, t. 31, fig. 2.
 Rocks on Stansfield moor, near Todmorden. Fr. Spring. (S. Gibson.)
- 2. A. ROTHII. Hooker in Linn. Trans. vol. 10, p. 395, t. 31, fig. 3.

 A. RUPESTRIS. Smith, Fl. Brit. p. 1178.

 Rocks in the mountainous districts, frequent. Fr. Spring.

DIVISION II. ASTOMI.

2. PHASCUM.

- 1. P. SERRATUM. Hooker.
 P. STOLONIFERUM. Dicks. Fasc. 3, p. 1, t. 7, fig. 2.
 Shady banks. Fr. Spring.
- 2. P. ALTERNIFOLIUM. Fr. Jan.—Feb.
 Broad-bottom, near Mytholm-royd. (S. Gibson.)
- 3. P. CRISPUM. Fr. March. Banks and fields, &c.
- 4. P. Subulatum. Fr. Spring.

 Dry banks, frequent.
- 5. P. AXILLARE. Fr. Spring.

 Moist banks.
- 6. P. MUTICUM. Fr. Spring.

 Moist banks. Addingham. Cross-lane, the foot-road to Aske.

 Hareley wood, near Todmorden.
- 7. P. CUSPIDATUM. Fr. Spring.
 Moist banks. Steeton. Between York and Haxby. Ganthorpe.

DIVISION III. GYMNOSTOMI.

3. SPHAGNUM.

- 1. S. obtusifolium. Fr. Spring.
 - Bogs, &c. very common.
 - a. vulgaris. Terrington carr and Stockton common.
 - B. MINUS. In fruit on Stockton common.

- 2. S. SQUARROSUM. Fr. June. Bogs, frequent.
- 3. S. ACUTIFOLIUM. Fr. Spring.
 Bogs, extremely common.
- 4. S. CUSPIDATUM. Fr. Spring.

 Bogs. In fruit on Stansfield moor. (S. Gibson.)

4. ŒDIPODIUM.

1. CE. GRIFFITHIANUM. Schwaegr. Fr. Aug. GYMNOSTOMUM GRIFFITHIANUM. Hooker. Ingleborough. (Rev. J. Dalton.)

5. GYMNOSTOMUM.

- 1. G. VIRIDISSIMUM.
 - Bolton woods. (J. Howarth and W. Greenwood.) Old wall at Hareley wood. (J. Nowell.)
- 2. G. CURVIROSTRUM. Fr. Summer.

 Moist rocks. Near Gainsford, &c.
- 3. G. RUPESTRE. Hooker. Fr. Autumn.
 Wet rocks, not rare. Ogden clough, &c.
- 4. G. TRUNCATULUM. Fr. Winter. Walls, banks, &c.
- 5. G. FASCICULARE. Fr. Spring.
 Moist banks.
- 6. G. PYRIFORME.

Moist banks. Hareley wood. (J. N.)

7. G. Donianum.

Rocks at the High force, Teesdale. (R. B. Bowman, Esq.)

8. G. MICROSTOMUM. Fr. April.

HYMENOSTOMUM MICROSTOMUM. Brown in Linn. Trans. vol. 12, p. 572.

Banks, &c. near Ganthorpe. West field, near Richmond.

9. G. OVATUM. Fr. Feb. Castle bank, Richmond.

10. G. TENUE.

Sandbeck, west of the road to Scotton.

6. ANICTANGIUM.

1. A. CILIATUM. Fr. March.

Craven, frequent. In many of the cloughs in the neighbourhood of Todmorden.

7. SCHISTOSTEGA.

1. S. PENNATA.

Thieveley scout, near Todmorden. July 26th, 1840. (J. Nowell and J. Howarth.)

DIVISION IV. PERISTOMI.

8. DIPHYSCIUM.

I. D. FOLIOSUM. Fr. Summer.

Walls, &c. in elevated situations. Stiperden clough, &c. near Tod-morden. (J. Nowell.)

9. TETRAPHIS.

1. T. PELLUCIDA. Fr. Spring.

On trees, &c. Stiperden clough, near Todmorden. High-green wood, near Heptonstall, &c.

2. T. BROWNIANA. Hooker. Fr. Spring.

T. OVATA. Hobson's British Mosses, vol. 1, No. 9.
In many of the cloughs in the neighbourhood of Todmorden, Heptonstall, &c.

10. SPLACHNUM.

1. S. SPHERICUM. Fr. Summer.

Mountainous situations, frequent.

2. S. MNIOIDES. Fr. Summer.

Greenfield, in Saddleworth. Summit of Ingleborough. 1838. (J. N.)

3. S. Angustatum. Fr. Autumn.

Ingleborough. (Sir W. J. Hooker.)

4. S. AMPULLACEUM. Fr. Summer.

Bogs, not very common.

11. ENCALYPTA.

1. E. STREPTOCARPA. Fr. Spring.

On walls, &c. In fruit on an old wall near Bolton bridge, found by Mr. John Nowell and Mr. John Howarth, of Todmorden.

2. E. VULGARIS. Fr. May.

On trees, rocks, &c. York, Tadcaster, Terrington, Scackleton. Mud walls on the foot-road to Aske, near Richmond. Teesdale, Malham, &c.

3. E. CILIATA.

Between Malham cove and Gordale. (W. Wilson, Esq.)

4. E. RHAPTOCARPA. Fr. Summer.

On the summit of Ingleborough. July, 1838. (J. Nowell.)

12. WEISSIA.

1. W. NUDA. Fr. Spring.

On clayey banks in the neighbourhood of Heptonstall. Tod-morden, &c. not uncommon.

2. W. LANCEOLATA. Fr. March.

Moist banks. Castle bank, Richmond. Near York, &c.

3. W. STRIATA.

Moist banks and rocks. Green's clough, Cliviger, near Todmorden.

4. W. TRICHODES. Fr. Spring.
On stones in Hareley wood, near Todmorden. (J. Nowell.)

W. CIRRATA. Fr. Spring.

 On trees. High-green wood, near Heptonstall. (S. Gibson.)
 Whitsuncliffe woods. Bolton woods.

6. W. CURVIROSTRA. Fr. Autumn.

Sandy and gravelly banks. Neighbourhood of Heptonstall and
Hebden bridge. (S. Gibson.) Terrington carr. Quarry in Castle
Howard Park.

7. W. CONTROVERSA. Fr. Spring. Banks, &c. very common.

8. W. RECURVATA. Fr. June.

Rocks. Bolton Abbey. Thieveley. Very common in Hareley wood, near Todmorden.

9. W. ACUTA. Fr. Summer.
Rocks in mountainous situations. Ingleborough. Near Todmorden.
Heptonstall, &c.

 W. CRISPULA. Fr. May. Rocks in Howley wood, Castle Howard.

11. W. VERTICILLATA. Fr. Aug.
Wet rock, Clink bank spring, near Richmond.

12. W. PUSILLA. Fr. May.
Summit of Ingleborough and at Gordale. (J. Nowell.)

13. GRIMMIA.

1. G. APOCARPA. Fr. Spring.
On trees, wet rocks, &c. Not rare in the mountainous districts of Yorkshire.

2. G. PULVINATA. Fr. Spring. Very common.

3. G. TRICHOPHYLLA. Fr. Summer.
On a wall near Long Preston, Craven. July, 1838. (J. Nowell.)

4. G. DONIANA. Fr. April.
Walls. Stansfield moor, near Todmorden. (J. Nowell.)

5. G. SAXICOLA.

Rocks in Ramsden wood, near Todmorden, very rare. Nov. 1836. (J. Nowell and J. Howarth.)

14. DIDYMODON.

1. D. PURPUREUM. Fr. Spring.
On the ground and on banks, very common.

2. D. FLEXIFOLIUM. Fr. Spring.

Greenfield, in Saddleworth. (Mr. Hobson.) Several places in Stansfield, but not in fruit.

3. D. BRUNTONI. Fr. June.

Rocks at Thieveley scout, near Todmorden. (J. Nowell.) Rag scout. Stansfield.

4. D. RIGIDULUM. Fr. Winter.
Shady rocks. Stansfield moor, near Todmorden. High-green wood, near Heptonstall. (S. Gibson.) Downholme Park wall.

D. TRIFARIUM. Fr. Winter.
 Moist banks. High-green wood. Ramsden's wood, near Tod-morden, &c.

6. D. CAPILLACEUM. Fr. Summer.

Mountainous situations, frequent. On Ingleborough, very fine.

7. D. HETEROMALLUM. Fr. Summer.
On the earth in the mountainous parts of the county.

15. TRICHOSTOMUM.

1. T. LANUGINOSUM. Fr. Spring.
Frequent on rocks and stones in the mountainous districts.

T. CANESCENS. Fr. Spring.
 Heaths, &c. Moor near the Beacon, Richmond. Barden Tower.
 Childwife moor, near Halifax, &c.

3. T. HETEROSTICHUM. Fr. Spring. Old walls, very common.

4. T. ACICULARE. Fr. Spring.

Wet rocks, frequent. Ogden clough, near Halifax. Cloughs in the neighbourhood of Todmorden and Heptonstall.

5. T. FASCICULARE. Fr. Spring.
In the same localities as the last.

6. T. POLYPHYLLUM. Fr. Spring.
Wet rocks. Frequent in Craven. High-green wood, &c.

7. T. ELLIPTICUM. Fr. Spring.
Rocks. Crimsworth dean, near Todmorden. (S. Gibson.)

16. DICRANUM.

1. D. BRYOIDES. Fr. Winter.
Moist banks, frequent.

2. D. ADIANTOIDES. Fr. Spring.
Bogs, &c. very common.

3. D. TAXIFOLIUM. Fr. Winter.
Moist banks, common.

4. D. GLAUCUM.

Bogs and heaths, very abundant, but always barren.

5. D. CERVICULATUM. Fr. June.

Bogs and heaths.

 D. FLEXUOSUM. Fr. Winter.
 Bogs, heaths, &c. Ganthorpe Broats Plantation. Scackleton moor, South Cave. High-green wood, &c.

7. D. STRUMIFERUM. Fr. Autumn. Downholme moor.

8. D. FLAVESCENS. Fr. Aug. Shedding clough, near Todmorden. (S. Gibson.)

9. D. SQUARROSUM. Fr. Spring.

Wet rocks in mountainous situations; bearing fruit abundantly in the deep cloughs in the neighbourhood of Todmorden.

10. D. PELLUCIDUM. Fr. Winter.

Wet rocks and sides of streams, very common, in the Halifax district and in the Vale of Todmorden.

11. D. SPURIUM.

Yorkshire. (Mr. Teesdale.)

12. D. SCOPARIUM. Fr. Aug.

Woods, very common.

a. vulgaris. Cumm Hagg wood.

 β . Majus. Woods in mountainous situations.

7. Fuscescens. Walls. Ray wood.

13. D. VARIUM. Fr. Winter.

Moist woods, &c.

B. RUFESCENS. Kilburn Pastures, near Heptonstall. (S. Gibson.)

14. D. HETEROMALLUM. Fr. Winter. Sandy banks, frequent.

15. D. UNDULATUM. Fr. Autumn.

Cumm Hagg wood, near Castle Howard. East end of Penhill.

17. TORTULA.

1. T. RIGIDA. Fr. Nov.
Clay banks. Near Steeton. (S. Gibson.) Rag scout, near Todmorden. (J. Nowell.)

2. T. CONVOLUTA. Fr. Spring.

Near Steeton. (S. Gibson.) Fields in Stansfield, &c. Near Tod-morden.

3. T. MURALIS. Fr. April.

Old walls, &c. very common.

4. T. RURALIS. Fr. April.

Walls, thatched roofs, &c.

5. T. SUBULATA. Fr. Dec.

On the ground, very abundant.

6. T. UNGUICULATA. Fr. Winter.

On hedge banks, frequent.

7. T. TORTUOSA. Fr. July.

Rocks. Gordale. Bolton woods. Teesdale. Wensleydale. Ganthorpe.

8. T. FALLAX. Fr. Summer.

In fields, &c. not uncommon.

18. CINCLIDOTUS.

1. C. FONTINALOIDES. Fr. Spring.

On stones in streams of water in the mountainous districts of Yorkshire, frequent.

19. POLYTRICHUM.

- 1. P. UNDULATUM. Fr. Oct.
 Shady woods, frequent.
- 2. P. HERCYNICUM. Fr. Summer.
 On high moors. Stansfield moor, near Todmorden, &c.
- 3. P. PILIFERUM. Fr. Spring.
 On heaths, very common.
- 4. P. JUNIPERINUM. Fr. Spring.
 Blackstone-edge. Moors near Todmorden, &c.
- 5. P. COMMUNE. Fr. June.
 Woods, heaths, &c. very common.
- 6. P. ALPINUM. Fr. Summer.

 Langfield moor, near Todmorden. Ingleborough and other similar situations.
- P. URNIGERUM. Fr. Winter.
 On banks and sides of streams in mountainous situations. Shedding clough. High-green wood, &c.
- 8. P. ALOIDES. Fr. Winter.
 Moist shady banks, frequent.
- 9. P. NANUM. Fr. Winter. Sandy banks, frequent.

20. FUNARIA.

- 1. F. HYGROMETRICA. Fr. May.

 Very abundant, especially in old charcoal pits.
- 2. F. MUHLENBERGII. Fr. April. Rocks. Malham.

21. ORTHOTRICHUM.

- 1. O. CUPULATUM. Fr. April.

 Rocks and trunks of trees. Very common in the neighbourhood of Malham and other parts of Craven.
- 2. O. ANOMALUM. Fr. April.

 In the same localities as the last.
- 3. O. DRUMMONDII. Fr. Aug.
 Trunks of trees. High-green wood. (S. Gibson.)
- 4. O. AFFINE. Fr. Aug.
 Trunks of trees. Teesdale. Wensleydale. Bolton bridge, &c.
- 5. O. RUPINCOLA. Fr. Summer.

 Rocks and stones. Near Bolton bridge.
- 6. O. DIAPHANUM. Fr. Spring.

 Trees, walls, &c. Bolton bridge, near Fairfield hall, Wharfedale.

 Ganthorpe. Bank-house ing, near Richmond.
- 7. O. STRIATUM. Fr. June.
 Trunks of trees, frequent.
- 8. O. LYELLII. Fr. Aug.
 On trees. Malham.

9. O. HUTCHINSIÆ.

High-green wood. (S. Gibson.)

10. O. LUDWIGII. Fr. June.

On trees. High-green wood. (S. Gibson.)

11. O. CRISPUM. Fr. Aug.

On trees, frequent.

12. O. PULCHELLUM. Fr. May.

Trees. Bolton bridge. Aske wood. Billy bank wood, near Richmond. Gordale. Near Malham.

13. O. SPECIOSA.

Near Bolton bridge. (S. Gibson.)

22. BRYUM.

1. B. ANDROGYNUM.

Woods and banks, not common. Near Heptonstall, bearing Gemme. (S. Gibson.)

We have not observed the Capsules in any part of the county.

2. B. PALUSTRE. Fr. June.

Bogs, frequent.

3. B. TRICHODES. Fr. Aug.

Moor at the Beacon, Richmond.

4. B. DEALBATUM. Fr. Summer.

Wet pastures at Stockdale farm, near Settle. On Ingleborough.

5. B. JULACEUM. Fr. Winter.

Moist rocks, &c.

6. B. CARNEUM. Fr. Spring. Banks, walls, &

Banks, walls, &c. Ogden clough. Vale of Todmorden. Clink bank, near Richmond.

7. B. Albicans. Fr. Spring.

Frequent on wet banks in Hareley wood, near Todmorden.

8. B. ARGENTEUM. Fr. Spring.
On old walls, frequent.

9. B. ZIERII.

On Ingleborough. July, 1838. (J. Nowell and W. Greenwood.)

10. B. PYRIFORME. Fr. June.

Banks at Haxby near York, and on garden pots in greenhouses and stoves.

11. B. CAPILLARE. Fr. May.

Heaths and walls. Billy bank wood, near Richmond. In the neighbourhood of Todmorden, Heptonstall, &c.

12. B. CÆSPITITIUM. Fr. May.

Banks and walls, frequent.

13. B. TURBINATUM. Fr. July.

Wet places. Very common in the elevated districts of the county.

14. B. NUTANS. Fr. May.

Walls. Downholme moor. Shibden dale, near Halifax, &c.

15. B. ELONGATUM.

Thie veley scout. July 26th, 1840. (J. Nowell and J. Howarth.)

16. B. VENTRICOSUM. Fr. July.

On the ground in damp places. Ogden clough. Shedding clough.

Moor near the Beacon, Richmond.

17. B. ROSEUM. Fr. Winter.

Heaths and commons. Not very uncommon, but rare in fruit.

 B. LIGULATUM. Fr. Spring. Banks and woods, frequent.

19. B. Punctatum. Fr. April.
Wet boggy places, very common.

20. B. ROSTRATUM. Fr. May.
Shady banks. Cum Hagg wood, near Castle Howard. Banks of
the Swale. Billy bank wood. High-green wood, &c.

B. MARGINATUM. Fr. June.
 Woods and shaded banks. Banks of the Swale. Billy bank wood.
 Shedding clough, &c. On Ingleborough.

B. HORNUM. Fr. April.
 Wet places, common. Near York. Richmond. Halifax. Tod-morden, &c.

B. CUSPIDATUM. Fr. April.
 Woods. Banks of the Swale. Near the Foss, Richmond. Stansfield moor, &c.

23. CINCLIDIUM.

Swartz in Diario Schraderi, 1801, p. 25, t. 2.

Fructificationes hermaphroditæ, discoideæ; paraphysibus clavatis.

Capsula basi strumosa, oblonga.

Peristomium duplex; exterius dentibus 16, acutis inflexis; interius indivisum cupulatum nervis sedecim firmatum.

1. C. STYGIUM. Wahlenberg, Flora Lapponica, p. 355.

This interesting addition to the British Flora was discovered on the moor near Malham Tarn, June 13th, 1836, by Messrs, John Nowell.

moor near Malham Tarn, June 13th, 1836, by Messrs. John Nowell, John Howarth, and William Greenwood, of Todmorden.

24. BARTRAMIA.

1. B. Pomiformis. Fr. Spring.

Dry banks and walls, frequent.

2. B. ITHYPHYLLA. Fr. Spring. On walls in Cliviger.

3. B. GRACILIS. Fr. Summer.
On Ingleborough. (J. Nowell.)

4. B. FONTANA. Fr. Summer.
Wet springy ground, frequent.

B. ARCUATA. Fr. Winter.
 Wet banks. Stockton and Langwith, near York. Terrington carr. Thieveley scout, near Todmorden. Shedding clough. Broad bank, near the division of the counties of York. and Lanc, on the Colne road. At the Haven in Erringden.

25. LEUCODON.

1. L. SCIUROIDES. Fr. Summer.

Trunks of trees. Malham. Bolton woods in fruc. very rare. (J. Howarth and W. Greenwood.)

26. NECKERA.

1. N. Pumila. Fr. Summer.
Woods. Bolton woods.

2. N. CRISPA. Fr. Spring.

Clapdale woods, at the foot of Ingleborough. Bolton woods, near the Strid. Billy bank wood, near Richmond. In the Eavs at Heptonstall.

27. ANOMODON.

A. CURTIPENDULUM. Fr. Spring.
 Banks and trees. Bolton woods, and many other places in Craven. Downholme Park.

2. A. VITICULOSUM. Fr. Winter.

Trees and rocks. Bolton woods. Round Howe, near Richmond.

28. DALTONIA.

1. D. HETEROMALLA. Fr. April.
On trees. Near Croft, Yorkshire. (Rev. J. Dalton.)

29. FONTINALIS.

1. F. ANTIPYRETICA. Fr. Summer.
Rivers and brooks, frequent.

2. F. SQUAMOSA. Fr. June.

In the Hebden, near Lee mill. (S. Gibson.)

30. HOOKERIA.

1. H. LUCENS. Fr. Spring.
Wet rocks and banks, frequent. Halifax. Todmorden. Richmond, &c.

31. HYPNUM.

1. H. TRICHOMANOIDES. Fr. March.
Trees. Not rare.

2. H. COMPLANATUM. Fr. Spring.

Trunks of trees, frequent. Caldene clough, &c.

3. H. RIPARIUM. Fr. Spring.
Wet banks. Ganthorpe. Haxby.

4. H. UNDULATUM. Fr. Spring. Woods, frequent.

5. H. DENTICULATUM. Fr. May.

Woods and rocks, very common.

- 6. H. MEDIUM. Fr. Spring.
 On trees. Easby, near Richmond, on Salix fragilis.
- H. TENELLUM. Fr. Winter.
 Old walls in Castle Howard Park. Rocks in Billy bank wood, near Richmond. Jannet's cave, Gordale. Near Malham. (J. Nowell.)
- 8. H. SERPENS. Fr. May. On trees, frequent.
- 9. H. POPULEUM. Fr. Winter.
 On trees and on stones in shady situations.
- H. STRAMINEUM.
 Midgley moor. (S. Gibson.) Common on Stansfield moor, but always barren. (J. N.)
- 11. H. MURALE. Fr. Winter.
 Walls and stones. York, Ganthorpe, &c.
- H. PURUM. Fr. Winter.
 Banks and woods. In fruit, Scackleton moor and Castle Howard Park. Hareley wood, near Todmorden. High-green wood.
- H. SCHREBERI. Fr. October.
 Woods. In fruit on Scackleton moor, Ogden clough, Turner clough,
 &c.
- H. MONILIFORME. Near the summit of Ingleborough. July, 1838. (J. N.)
- 15. H. CATENULATUM.
 Wet rocks and woods. Stansfield moor, barren.
- H. PLUMOSUM. Fr. October.
 Moist banks and rocks. High-green wood. Near Heptonstall.
- H. PULCHELLUM. Fr. September.
 Woods. Green's clough, three miles north-west from Todmorden;
 and in Gorpley clough.
- 18. H. POLYANTHOS.

 Bolton woods. (S. Gibson.)
- 19. H. SERICEUM. Fr. Winter.
 On walls in Craven, &c. very abundant.
- 20. H. SALEBROSUM.
 Helk's wood, Ingleton. 1838. (W. Wilson, Esq.)
- 21. H. LUTESCENS. Fr. Spring.

 Frequent about Malham, but rare in fruit. (J. N.) On banks and stems of trees. Haxby, near Ganthorpe.
- 22. H. NITENS.

 Marshy ground. Between Copgrove and the River Ure. (Rev. J. Dalton.)
- 23. H. Albicans. Fr. Nov.
 On the ground in sandy soil. Hareley wood.
- 24. H. ALOPECURUM. Fr. Oct.
 Woods, shady banks and wet rocks, frequent.
- 25. H. DENDROIDES. Fr. Oct.
 Woods and bogs. Near Todmorden and Hebden bridge, in fruit.

- 26. H. CURVATUM. Fr. Winter.

 Trees and rocks. High-green wood. Ray wood. Cum hagg.
 Castle Howard.
- 27. H. MYOSUROIDES. Fr. Autumn.

 Trees. Castle Howard Park. Downholme Park.
- 28. H. SPLENDENS. Fr. Spring. Woods, frequent.
- 29. H. PROLIFERUM. Fr. Spring. Woods, frequent.
- 30. H. PRELONGUM. Fr. Nov.
 Trunks of trees, frequent.
- 31. H. FLAGELLARE.
 Widdop and Stiperden cloughs, near Todmorden.
- 32. H. CRASSINERVUM.

 Abundant in the river bed at Weathercoat cave, below Ingleborough. 1838. (W. Wilson, Esq.)
- 33. H. RUTABULUM. Fr. Nov. On trees, very common.
- 34. H. VELUTINUM. Fr. March.
 Woods and hedge banks, common.
- 35. H. RUSCIFOLIUM. Fr. Oct.

 Upon wood and stones in rivers and ponds.
- 36. H. STRIATUM. Fr. Nov.
 Woods and shady banks, common.
- 37. H. CONFERTUM. Fr. Nov.
 Trunks of trees, &c. frequent.
- 38. H. CUSPIDATUM. Fr. Nov.

 Boggy moors, frequent.
- 39. H. CORDIFOLIUM. Fr. March.
 Bogs. Downholme moor. Moors in the vale of Todmorden, &c.
- 40. H. STELLATUM. Fr. May. Bogs. Widdop. (S. Gibson.)
- 41. H. LOREUM. Fr. Dec.
 Woods, very abundant.
- 42. H. TRIQUETRUM. Fr. Dec. Woods, very frequent.
- 43. H. BREVIROSTRE. Fr. Nov.

 H. TRIQUETRUM. β. MINUS. Musc. Brit. ed. 1, p. 108.

 Woods. Bolton woods. Billy bank wood.
- 44. H. SQUARROSUM. Fr. Nov.
 Woods and heaths, very abundant.
- 45. H. FILICINUM. Fr. Spring.

 Wet pastures. In fruit on Stockdale farm, near Settle. Bog between Ganthorpe and Terrington.
- 46. H. ATRO-VIRENS.

 Training ground, near Richmond.

- 47. H. PALUSTRE. Fr. Spring.
 Wet rocks, ponds, &c. common.
- 48. H. FLUITANS. Fr. Winter.

 In streams of water. Black Plantations, near Richmond. In fruit on Stansfield moor.
- 49. H. ADUNCUM. Fr. Spring. Bogs, frequent.
- 50. H. UNCINATUM. Fr. June.

 Banks, walls, &c. very common in the mountainous districts.
- 51. H. RUGULOSUM. Fr. unknown. Gordale, abundant.
- 52. H. COMMUTATUM. Fr. May.
 Wet places, very common.
- 53. H. SCORPIOIDES. Fr. March. Bogs, frequent.
- 54. H. CUPRESSIFORME. Fr. Oct.
 Trunks of trees, frequent.
- H. INCURVATUM. Schwaegr. Suppl.
 Helks wood, near Ingleton. July, 1838. (W. Wilson, Esq.)
- 56. H. CRISTA CASTRENSIS.
 Woods near Croft. (Rev. J. Dalton.)
- 57. H. MOLLUSCUM. Fr. Nov. Woods, frequent.

ADDENDA.

COMMUNICATED BY MR. S. GIBSON, HEBDEN BRIDGE.

PHLEUM ARENARIUM. Sea Cat's Tail Grass.

Atwick, near Hornsea, &c.

Alopecurus fulvus. Strong Spiked Fox Tail Grass.

Near Selby. (1836.)

AIRA CÆSPITOSA. Turfy Hair Grass.

B. RIGIDA.

Roots in thick tufts; culms one foot high, panicle subcontracted; leaves short ($1\frac{1}{4}$ inches) involute; sheaths very long and deeply striated; base of the florets longly pilose; pedicle of the upper floret long and pilose; awn straight, inserted at the base of, and a little shorter than the corolla.

Near the division of Wadsworth and Howorth moors.

FESTUCA UNIGLUMIS. Single Glumed Fescue Grass.

On the sea coast at Atwick.

STIPA PENNATA. Common Feather Grass. July.

Rumbalds moor. (1839.)

Sagina procumbens. Var. β . spinosa.

This I consider a distinct species; it differs from the common state of the plant in the edges of the leaves being margined with minute diaphanous spines.

Halifax, Shibden, Hebden bridge, &c.

The Sagina maritima of the Manchester Flora, page 14, is either a smooth variety of the apetala or a new species.

ERYTHRÆA PULCHELLA. Dwarf Branched Centaury. June.

On the cliff at Bridlington Quay.

Angelica Archangelica. Garden Angelica.

On the side of a small stream at Speeton. (1837.)

RUMEX ACUTUS. Sharp Dock. July-August.

In waste ground, frequent. Hebden bridge, &c.

CERASTIUM. The Redcar plant is Semidecandrum.

Asarum europæum.

Erase the Settle habitat; the hedge having been destroyed and the ditch filled up.

RAPHANUS MARITIMUS. Sea Radish. June.
In corn fields, frequent. Bridlington, &c.

Sinapis nigra. Black Mustard. July—August.
In corn fields at Hebden bridge, &c.

POLYGALA AMARA. Bitter Milkwort. (Don, in Eng. Bot. Suppl.)
Whitby.

MELILOTUS LEUCANTHA. Hook. White Melilot. July.

In corn fields, rare, at Garforth, near Leeds.

CARDUUS ERIOPHORUS. p. 62.

Must be expunged, as it is inserted in the Genus Cnicus, p. 60.

HIERACIUM PULMONARIUM. Lungwort Hawkweed.
On Skipton Castle walls. On a rock near Heptonstall.

Apargia Hispida. Rough Hawkbit. July.

Common in meadows and pastures. Broadbottom, Skipton, &c.

Habenaria chlorantha. Yellow Butterfly Orchis. Near Mytholmroyd. (1838.)

Salix parvifolia. Small-leaved Dwarf Willow.
On Stockton forest.

Salix aquatica. Water Sallow. April. Bolton woods.

Salix Aurita. Round-eared Sallow. April—May. Caldene clough, near Lumb mill.

Salix viminalis. Common Osier. April. Mytholmroyd, &c.

Salix vitellina. Golden Osier. May.

Mytholmroyd, &c.

Carex cæspitosa. Var. β . Chlorocarpos.

Fertile spikes, 4 or 5 erect, few flowered, glumes green with the margins brown; fruit longer than the glumes, oblong, lanceolate, light green; this differs from the common state of the plant, in the fruit, which comes gradually to a point, and is about one-third longer.

Near Hebden bridge.

CAREX LÆVIGATA. Smooth Stalked Carex.

Common in the woods at Hebden bridge. In Ogden clough, Turner clough, and other places in the neighbourhood of Halifax.

ASPIDIUM ANGULARE.

Beestones wood, Mr. W. Lord; and plentiful at the top of Shibden dale, near Halifax. In a wood near Luddenden Church. September 4th, 1840. (Mr. S. King.)

The following additional habitats of some of the rarer Yorkshire Plants growing within three miles of Askern, near Doncaster, have been kindly communicated to me by E. Lankester, M.D. F.L.S. &c. May, 1840.

THALICTRUM MAJUS.

Marshes and ditches, abundant.

Anemone pulsatilla.

Encampments on Smeaton craggs.

PAPAVER SOMNIFERUM.

Gravel pits in Campsall Park.

CHEIRANTHUS CHEIRI.

Quarry at Askern, back of the Crown Inn, and Smeaton craggs.

TEESDALIA NUDICAULIS.

Smeaton craggs.

HESPERIS MATRONALIS.

Campsall Park. Quarry at Stapleton, on the Pontefract road.

GERANIUM PYRENAICUM.

Road side between Campsall and Barnsdale.

ASTRAGALUS GLYCYPHYLLOS.

Campsall Park.

ASTRAGALUS HYPOGLOTTIS.

Smeaton craggs.

A beautiful variety with large white flowers has been gathered on Langton wold, near Malton, 1840, by Mr. J. Muckle, Malton. (H. B.)

SPIRÆA FILIPENDULA.

Smeaton craggs.

RIBES ALPINA.

Woods near Camp's Mount.

SIUM NODIFLORUM.

Ditches, frequent.

SISON AMOMUM.

Lanes, frequent.

Bupleurum rotundifolium.

Corn fields, Campsall.

VISCUM ALBUM.

Common on the Poplar, Crab, Hawthorn, &c.

VIBURNUM LANTANA.

Brakes, Askern.

VIBURNUM OPULUS.

Brakes, Askern.

LONICERA CAPRIFOLIUM.

Fields, Campsall.

DIPSACUS SYLVESTRIS.

Road to Smeaton.

DIPSACUS PILOSUS.

Fields, Campsall.

Conyza squarrosa.

Fields, Campsall.

MONOTROPA HYPOPITYS.

Camp's Mount and Campsall Park.

ANTIRRHINUM ELATINE.

Corn fields, Campsall.

Antirrhinum minus.

Smeaton craggs.

EUPHORBIA LATHYRIS.

Campsall.

TYPHA ANGUSTIFOLIA.

Shirley pool.

Collected near Doncaster, July, 1840, by Mr. O. A. Moore.

Rosa rubiginosa.

Conisbro'.

BALLOTA NIGRA. Var. Fl. Albo.

Near Prospect House, Doncaster, in the hedge.

RUMEX HYDROLAPATHUM.

Potteric carr.

ENANTHE PIMPINELLOIDES.

Carr near Loversall.

HIPPURIS VULGARIS.

Carr near Loversall.

POTOMAGETON DENSUS.

Carr near Loversall.

PASTINACA SATIVA.

Carr near Loversall.

CHENOPODIUM ACUTIFOLIUM.

Doncaster fields.

LEONURUS CARDIACA.

Road to Sprotbro'.

ORCHIS PYRAMIDALIS.

Levitt hagg.

Anagallis cærulea.

Doncaster.

The following Genera have accidentally been omitted in their proper place.

BRYONIA.

1. B. DIOICA. Bryony. May—September. 24
In hedges, not unfrequent.

ANTHOXANTHUM.

1. A. odoratum. Sweet-scented Vernal-grass. May—June. 44
In meadows and pastures, frequent.

CHARA.

1. C. VULGARIS.

In the ponds at Castle Howard. Askham bogs, near York.

2. C. HISPIDA.

Farnham mires, near Knaresborough. Ditches on Knavesmire, near York. Old brick ponds, two miles from Thirsk. In the brook at Malham tarn. Hamilton dyke, below Monk Frystone. Brick garth, near Selby.

3. C. FLEXILIS.

Ditch near the spa, Knaresborough. Bowling brook, near Bradford. South-east corner of the new dam, Bradford.

4. C. TRANSLUCENS.

Bowling brook, near Bradford.

ERRATA.

Page 5.—For Ranunculaceæ, read different species of Ranunculus.

Page 43.—For Ænothera, read Œnothera.

Page 72.—For junction of the Tees with the Boulder, read junction of the Black Beck with the Boulder.

Page 110 .- For Schænus, read Schænus.

INDEX TO THE NATURAL ORDERS.

ord	ER.	PAGE.	ord	ER.	PAGE.
1	Ranunculaceæ	3	50	Ericeæ	69
	Berberideæ	7		Pyroleæ	70
	Nymphæaceæ	7		Apocyneæ	71
4	Papaveraceæ	8	53		71
		8	54		
5	Fumariaceæ	-		Solaneæ	73
	Cruciferæ	.9	55		74
7	Violaceæ	14		Lentibulariæ	76
	Cistineæ	15	57	Scrophularineæ	77
9	Droseraceæ	15	58	Orobancheæ	79
10	Polygaleæ	16	59	Melampyraceæ	80
11	Malvaceæ	16	60	Verbenaceæ	80
12	Hypericineæ	17	61	Labiatæ	80
	Caryophylleæ	18	62	Elæagneæ	85
	Lineæ	21		Thymeleæ	85
$\hat{1}\hat{5}$	Tiliaceæ	22		Polygoneæ	86
		22			87
	Acerineæ	22		Chenopodeæ	
	Geraniaceæ		66	Sclerantheæ	88
	Oxalideæ	24	67	Urticeæ	88
	Balsamineæ	24	68	Resedaceæ	89
	Portulaceæ	24	69	Euphorbiaceæ	89
21	Crassulaceæ	24	70	Empetreæ	90
22	Saxifrageæ	26	71	Aristolochiæ	90
23	Salicariæ	27	72	Ceratophylleæ	90
24	Rhamneæ	27	73	Ulmaceæ	90
	Ilicineæ	28		Amentaceæ	91
	Celastrineæ	28	75	Cupuliferæ	93
	Leguminosæ	29		Coniferæ	94
	Rosaceæ	34	77	Myriceæ	94
	Pomaceæ	40	78	Callitrichineæ	94
	Grossulaceæ	41	79	Aroideæ	95
	Onagrariæ	42	80		95
	Circæaceæ	43	81	Typhaceæ	
				Fluviales	96
	Halorageæ	44	82	Pistiaceæ	98
	Umbelliferæ	44		Juncagineæ	98
	Stellatæ	49	84	Alismaceæ	98
	Caprifoliaceæ	51	85	Hydrocharideæ	99
	Lorantheæ	52	86	Irideæ	99
	Vaccinieæ	52	87		
39	Campanulaceæ	53	88	Melanthaceæ	104
40	Lobeliaceæ	54	89	Amaryllideæ	104
41	Valerianeæ	54	90	Liliaceæ	
	Dipsaceæ	54	91	Asphodeleæ	
	Compositæ	55	92	Smilaceæ	
	Boragineæ	65	93		
	Convolvulaceæ	67		Junceæ	
	Polemoniaceæ	68	95	Cyperaceæ	
	Plantagineæ	68	96		
	Plumbagineæ	69		Filices	
	Oloinam	60			120

LINNÆAN ARRANGEMENT OF THE GENERA.

CLASS I. MONANDRIA.

ORDER I. MONOGYNIA. PAGE. PAGE. Salicornia 87 Zostera Hippuris 44 Chara...... 146 ORDER II. DIGYNIA. CLASS II. DIANDRIA. ORDER I. MONOGYNIA. 69 Lycopus..... Fraxinus 69 Salvia..... 80 Veronica 77 Circæa 43 Pinguicula.... 76 Lemna 98 Utricularia..... 76 Cladium..... 112 ORDER II. DIGYNIA. CLASS III. TRIANDRIA. ORDER I. MONOGYNIA. Rhynchospora 110 Valeriana 54 Fedia 54 Crocus 100 Eleocharis 111 Iris..... 99 ORDER II. DIGYNIA. Alopecurus 117 Phleum 117 Milium 118 Agrostis...... 118 Avena 122 Aira 118 Arundo 122 Lolium 116 Melica 119 Holcus 118 Triticum 117 Poa...... 120 Hordeum 116 ORDER III. TRIGYNIA.

149

CLASS IV. TETRANDRIA.

ORDER I. MONOGYNIA.

Dipsacus Scabiosa Galium Asperula Sherardia Plantago ORDER I Ilex Sagina Radiola	$\begin{bmatrix} 28 \\ 19 \\ 22 \end{bmatrix}$	Centunculus	74 74 52 88 40 40
CLASS ORDER		ENTANDRIA. DNOGYNIA.	
Echium . Pulmonaria Lithospermum Symphytum Borago . Lycopsis Anchusa . Myosotis . Cynoglossum . Anagallis . Lysimachia Primula . Hottonia . Menyanthes . Erythræa . Hyosoyamus . Verbascum . Verbascum	65 66 66 66 66 66 67 75 75 74 775 773 71 73	Convolvulus Polemonium Vinca Solanum Atropa Samolus Jasione Campanula Lonicera Rhamnus Euonymus Impatiens Viola Ribes Hedera Glaux.	67 68 71 73 74 76 54 53 51 27 28 24 14 41 52 74
ORDE Gentiana	R II. 72	DIGYNIA. Sium	47
Cuscuta Chenopodium Beta Salsola Ulmus Scandix Anthriscus Chærophyllum Eryngium Sanicula Daucus Caucalis Torilis Myrrhis Bunium Enanthe Pimpinella	887 888 87 90 48 48 49 44 44 45 48 46 46 47	Sison Cicuta Conium Smyrnium Apium Ægopodium Meum Carum Cnidium Bupleurum Hydrocotyle Æthusa Imperatoria Selinum Angelica Pastinaca Heracleum	47 48 49 48 48 45 47 46 46 45 45 45 45 45 45

ORDER III. TRIGYNIA. PAGE. 51 ORDER IV. TETRAGYNIA. Parnassia ORDER V. PENTAGYNIA. 69 ORDER VI. HEXAGYNIA. ORDER VII. POLYGYNIA. Myosurus CLASS VI. HEXANDRIA. ORDER I. MONOGYNIA. Berberis.... Ornithogalum 106 Peplis..... Scilla 107 Fritillaria 105 Narcissus 104 Allium 106 Juneus 108 Luciola 109 ORDER III. TRIGYNIA. Rumex Tofieldia 104 Triglochin...... 98 ORDER IV. POLYGYNIA. Alisma CLASS VII. HEPTANDRIA. ORDER I. MONOGYNIA. CLASS VIII. OCTANDRIA. ORDER I. MONOGYNIA. Acer 22 Vaccinium..... 52 42 70 Œnothera 43 Calluna 70 Chlora 73 Daphne ORDER II. TRIGYNIA. Polygonum...... 86 ORDER III. TETRAGYNIA. CLASS IX. ENNEANDRIA. ORDER I. HEXAGYNIA.

CLASS X. DECANDRIA.

ORDER I. MONOGYNIA.

Monotropa	PAGE. 69 70
ORDER II. DIGYNIA.	
Scleranthus 88 Saponaria Chrysosplenium 26 Dianthus Saxifraga 26	18 18
ORDER III. TRIGYNIA.	
Arenaria 19 Silene	18
ORDER IV. PENTAGYNIA.	
Cotyledon 24 Sedum Agrostemma. Oxalis 24 Spergula Lychnis 19	19 20 19
CLASS XI. DODECANDRIA.	
ORDER I. MONOGYNIA.	05
Asarum 90 Lythrum	27
ORDER II. DIGYNIA.	
Agrimonia	
ORDER III. TRIGYNIA.	
Reseda 89	
ORDER IV. DODECAGYNIA.	
Sempervivum	
CLASS XII. ICOSANDRIA.	
ORDER I. MONOGYNIA.	
Prunus 34	
ORDER II. PENTAGYNIA.	
Mespilus 40 Spiræa Pyrus 41	34
ORDER III. POLYGYNIA.	
Rosa 38 Geum. Rubus 35 Fragaria. Tormentilla 37 Comarum Dryas. 38 Potentilla	38 37 38 37
CLASS XIII. POLYANDRIA.	
ORDER I. MONOGYNIA.	
Papaver 8 Cistus Chelidonium 8 Nymphæa Actæa 6 Nuphar	15 7 8

ORDER II. PENTAGYNIA.

Delphinium	Aquilegia	PAGE. 6 99
ORDER III.	POLYGYNIA.	
Thalictrum 3 Clematis 3 Anemone 3 Helleborus 5	Caltha Trollius Ranunculus	$\begin{matrix} 6 \\ 5 \\ 4 \end{matrix}$
. CLASS XIV.	DIDYNAMIA.	
ORDER I. GY	MNOSPERMIA.	
Leonurus 81 Glechoma 81 Mentha 81 Teucrium 81 Ajuga 81 Betonica 83 Lamium 83 Galeopsis 83 Galeobdolon 83 Stachys 82	Nepeta Ballota Marrubium Verbena. Scutellaria Thymus. Prunella. Origanum Clinopodium	83 82 82 80 84 84 84 84
•	**************************************	
ORDER II. A Lathræa. 80 Bartsia 78 Rhinanthus 78 Melampyrum 80 Euphrasia 78 Limosella 79	NGIOSPERMIA. Scrophularia. Digitalis Antirrhinum Pedicularis Orobanche	78
CLASS XV. T	ETRADYNAMIA.	
ORDER I,	SILICULOSA.	
Draba 9 Hutchinsia 10 Crambe 11 Cakile 11 Camelina 9	Cochlearia Senebiera Lepidium Thlaspi Teesdalia	11 9 10
ORDER II.	SILIQUOSA.	
Cheiranthus 13 Nasturtium 12 Barbarea 12 Arabis 13 Turritis 13 Cardamine 11	Sisymbrium Hesperis Erysimum Brassica Sinapis Raphanus	13 12 13 14
CLASS XVI.	MONODELPHIA.	
ORDER I. I	PENTANDRIA.	
Erodium	24	
ORDER II.	DECANDRIA.	
Geranium		

ORDER III.	POLYANDRIA.
Malva	
	. DIADELPHIA.
	HEXANDRIA 8
	. OCTANDRIA. 16
ORDER III	
Spartium 29 Genista 29 Ulex 29 Anthyllis 30 Ononis 30 Orobus 33 Lathyrus 33 Vicia 32 Ervum 32	Astragalus 36 Trifolium 31 Hedysarum 34 Ornithopus 34 Hippocrepis 34 Medicago 32 Lotus 32 Melilotus 36
CLASS XVIII.	POLYADELPHIA.
	POLYANDRIA. 17
CLASS XIX.	SYNGENESIA.
	YGAMIA ÆQUALIS.
Hypochæris 64 Cichorium 65 Crepis 63 Hieracium 63 Apargia 65 Picris 63 Tragopogon 65 Leontodon 63 Lactuca 62 Prenanthes 62	Sonchus 62 Lapsana 63 Carlina 61 Arctium 61 Carduus 62 Cnicus 60 Onopordum 60 Serratula 61 Eupatorium 55
ORDER II. POLY	GAMIA SUPERFLUA.
Tanacetum 59 Conyza 55 Gnaphalium 56 Artemisia 59 Bellis 58 Matricaria 59 Chrysanthemum 58 Pyrethrum 58 Doronicum 57	Erigeron 56 Solidago 56 Aster 56 Senecio 57 Tussilago 57 Anthemis 59 Achillea 59
	GAMIA FRUSTRANEA.
Centaurea	

CLASS XX. GYNANDRIA.

ORDER I. MONANDRIA.

OLDER I. MONANDRIA.	
Neottia 100 Gymnadenia Listera 100 Habenaria Epipactis 101 Ophrys Orchis 101 Malaxis	10 2 103
ORDER II. DIANDRIA.	
Cypripedium 103	
CLASS XXI. MONOECIA.	
ORDER I. MONANDRIA.	
Euphorbia	97
ORDER II. TRIANDRIA.	
Sparganium 96 Typha Carex 112 Kobresia	95
Sparganium 96 Typha Carex 112 Kobresia	112
ORDER III. TETRANDRIA.	
Littorella 69 Buxus	90
Urtica	91
ORDER IV. PENTANDRIA.	
Bryonia	
ORDER V. POLYANDRIA.	
Myriophyllum 44 Quercus Poterium 40 Corylus	$\frac{93}{94}$
Poterium 40 Corylus Sagittaria 99 Carpinus	94
Ceratophyllum	91
Fagus	95
CLASS XXII. DIOECIA.	
ORDER I. DIANDRIA.	
Salix 91	
ORDER II. TRIANDRIA.	
Empetrum	
ORDER III. TETRANDRIA.	
Hippophäe	52
ORDER IV. PENTANDRIA.	
Humulus	
ORDER V. HEXANDRIA.	
Tamus 108	
ORDER VI. OCTANDRIA.	
Rhodiola	
ORDER VII. ENNEANDRIA.	0.0
Mercurialis 90 Hydrocharis	99

ORDER VIII, I	MONODELPHIA.
PAGE.	Taxus 94
Jumperus	laxus
	POLYGAMIA.
ORDER I. I	MONOECIA.
Atriplex	
*	
CLASS XXIV.	CRYPTOGAMIA.
ORDER I.	FILICES.
Polypodium 123 Aspidium 123 Cystea 124 Asplenium 125 Scolopendrium 125 Grammitis 125 Blechnum 125 Pteris 126	Woodsia. 126 Hymenophyllum 126 Osmunda 126 Botrychium 126 Ophioglossum 126 Lycopodium 127 Equisetum. 127 Pilularia. 128
ORDER II	. MUSCI.
Andræa	Tortula
Phascum 129	Cinclidotus 134
Sphagnum 129	Polytrichum 135
Œdipodium 130	Funaria
Gymnostomum 130	Orthotrichum
Anictangium	Bryum 136
Schistostega	Cinclidium
Diphyscium 131	Bartramia
Tetraphis	Leucodon 138
Splachnum	Neckera
Encalypta 131	Anomodon
Weissia 131	Daltonia
Grimmia	Fontinalis 138
Didymodon	Hookeria 138
Trichostomum 133	Hvpnum

ALPHABETICAL INDEX.

	PAGE.		PAGE.
Aconitum	. 6	Atriplex	. 38
Acer	. 22	Atropa	
Achillea	. 59	Avena	
Acorus	. 95	Ballota	
Actæa	. 6	Barbarea	. 12
Adoxa	26	Bartramia	
Ægopodium		Bartsia	
Æthusa		Bellis	
Agrimonia		Berberis.	
Agrostemma		Beta	
Agrostis		Betonica	
Aira		Betula.	
Ajuga		Bidens	
Alchemilla.		Blechnum	
Alisma		Borago	
Allium		Botrychium	
Alnus		Brassica	
Alopecurus		Briza	
Anomodon		Bromus	
Anagallis		Bryonia	
Anchusa		Bryum	
Andræa		Bunium	
Andromeda		Bupleurum	
Anemone		Butomus	
Angelica		Buxus	. 90
Anictangium	. 130	Cakile	. 11
Anthemis	. 59	Callitriche	. 94
Anthoxanthum	. 146	Calluna	. 70
Anthriscus	. 48	Caltha	. 6
Anthyllis	. 30	Camelina	. 9
Antirrhinum		Campanula	. 53
Apargia		Cardamine	
Apium		Carduus	. 62
Aquilegia		Carex	
Arabis		Carlina	
Arbutus		Carpinus	
Arctium		Carum	
Arenaria	1 11	Caucalis	
Artemisia		Centaurea	
Arum		Centunculus	
Arundo		Cerastium	
Asarum		Ceratophyllum	
		Chærophyllum	
Asperula		Chara	
Aspidium			
Asplenium		Chelidarium	
Aster		Chelidonium	
Astragalus	. 30	Chenopodium	. 87

Chlora	73	Erigeron	56
Chrysanthemum	58	Eriophorum	111
Chrysosplenium	26	Erodium	24
Cichorium	65	Ervum.	$\overline{32}$
Cicuta	48	Erythræa	71
Cinclidium	137	Eryngium	49
Cinclidotus	134	Erysimum	12
Circæa	43	Euonymus	$\frac{12}{28}$
Cistus	15	Eupatorium	55
Cladium	112	Euphorbia	89
Clematis	3	Euphrasia	78
Clinopodium	84	Fagus	93
Cnicus	60	Fedia	54
Cnidium	46	Festuca	120
Cochlearia	11	Fontinalis	138
Colchicum	104	Fragaria	37
Comarum	38	Fraxinus.	69
Conium	49	Fritillaria	105
Convallaria	107	Fumaria	8
Convolvulus	67	Funaria Funaria	135
	55	Galanthus	104
Cornus	$\frac{55}{52}$	Galeobdolon	83
Corylus	94		83
Cotyledon	24	Galeopsis	49
Crambe	11	Genista	29
Crepis	63	Gentiana	72
Crocus	100	Geranium	22
Cuscuta	68		38
	67	Geum	36 74
Cynoglossum	120	Glaux	81
Cynosurus		Glechoma	
Cypripedium	103	Glyceria	119
Cystea	124 120	Gnaphalium	$\begin{array}{c} 56 \\ 125 \end{array}$
Dactylis	138	Grammitis	132
Daltonia		Grimmia	
Daphne	85 44	Gymnostomum	130
Daucus	6	Gymnadenia	102
Delphinium	18		102
Dianthus	133	Hedera	$\frac{52}{34}$
Didrmadan	132	Hedysarum	34 5
Didymodon		Helleborus	
Digitalis	79 54	Heracleum	$\frac{45}{13}$
Dipsacus	131	Hesperis	
Diphyscium		Hieracium	63
Doronicum	57	Hippocrepis	34
Draba	$\frac{9}{15}$	Hippophäe	$\begin{array}{c} 85 \\ 44 \end{array}$
Dryas		Hippuris	
_ ' .	38	Holcus	118
Echium	65	Hookeria	138
Eleocharis	111	Hordeum	116
Elymus	116	Hottonia	75
Empetrum	90	Humulus	89
Encalypta	131 42	Hutchinsia	10
Epilobium		Hydrocharis	99
Epimedium	7	Hydrocotyle	49
Epipactis	101	Hymenophyllum	126
Equisetum	127	Hyoscyamus	73
Erica	70	Hypericum	17

3	PAGE.	PAGE.
Hypnum	138	Myrrhis 48
Hypochæris	64	Narcissus 104
Jasione	54	Nardus
	28	Narthecium
Ilex	24	
Impatiens	45	Nasturtium 12
Imperatoria		Neckera
Inula	56	Neottia 100
Iris	99	Nepeta 83
Juneus	108	Nuphar 8
Juniperus	94	Nymphæa 7
Kobresia	112	Œdipodium 130
Lactuca	62	Enanthe 46
Lamium	83	Enothera
Lapsana	63	Ononis 30
Lathræa	80	Onopordum 60
Lathyrus	33	Ophioglossum 126
Lemna	98	Ophrys 103
Leontodon	63	Orchis
Leonurus	81	Origanum
Leucodon	138	Ornithogalum 106
Lepidium	9	Ornithopus 34
	69	Orobanche
Ligustrum		
Limosella	79	Orobus
Linum	21	Orthotricum 135
Listera	100	Osmunda 126
Lithospermum	66	Oxalis 24
Littorella	69	Papaver 8
Lolium	116	Parietaria 88
Lonicera	51	Paris 108
Lotus	32	Parnassia
Luciola	109	Pastinaca 45
Lychnis	19	Pedicularis 78
Lycopodium	127	Peplis 27
Lycopsis	66	Phalaris
Lycopus	81	Phascum
Lysimachia	75	Phleum
Lythrum	27	Picris 63
Malaxis	103	Pilularia 128
Malva	16	Pimpinella
Marrubium	82	Pinguicula
Matricaria	59	Plantago
	32	
Medicago	80	
Melampyrum	- 0	
Melilotus	30	Polypodium 123
Melica	119	Polygala
Mentha	81	Polygonum 86
Menyanthes	73	Polytrichum 135
Mercurialis	90	Potamogeton
Mespilus	40	Potentilla
Meum	45	Poterium 40
Milium	118	Prenanthes
Monotropa	71	Primula 74
Montia	24	Prunella 84
Myosotis	67	Prunus 34
Myosurus	4	Pteris 126
Myrica	94	Pulmonaria 65
Myriophyllum	44	Pyrethrum 58
7 -I V		

	PAGE.		PAGE.
Pyrola		Sparganium	. 96
Pyrus		Spartium	
Quercus	. 93	Spergula	
Radiola		Sphagnum	129
Ranunculus		Spiræa	34
Raphanus	. 14	Splachnum	
Reseda		Stachys	82
Rhamnus	27	Statice	69
Rhinanthus	78	Stellaria	21
Rhodiola		Stipa	142
Rhynchospora		Stratiotes	99
Ribes	41	Symphytum	66
Rosa		Tanacetum	59
Rottbollia		Tamus	108
Rubus		Taxus	94
Rumex		Teesdalia	10
Ruppia		Tetraphis	
Sagina		Teucrium	81
Sagittaria		Thalictrum	
Salicornia		Thlaspi	10
Salix		Thymus	84
Salsola		Tilia	$\frac{64}{22}$
Salvia		Tofieldia	
Sambucus		Torilis	
Samolus			45
Sanguisorba	40	Tormentilla	37
		Tortula	
Sanicula Saponaria		Tragopogon	65
Sayifraga	26	Trichostomum	133
Saxifraga	20	Trientalis	76
Scabiosa		Trifolium	31
Scandix		Triglochin	98
Scheuchzeria		Triodia	120
Schistostega		Triticum	117
Scheenus	110	Trollius	5
Scilla		Tulipa	105
Scirpus		Turritis	13
Scleranthus		Tussilago	57
Scolopendrium		Typha	95
Scrophularia		Ulex	29
Scutellaria	84	Ulmus	90
Sedum	25	Urtica	89
Selinum	45	Utricularia	76
Sempervivum	25	Vaccinium	52
Senebiera	. 11	Valeriana	54
Senecio		Verbascum	73
Serratula		Verbena	80
Sesleria		Veronica	77
Sherardia	. 51	Viburnum	51
Silene	. 18	Vicia	32
Sinapis	14	Vinca	71
Sison	47	Viola	$1\overline{4}$
Sisymbrium	12	Viscum	52
Sium		Weissia	131
Smyrnium	49	Woodsia	126
Solanum	73	Zannichellia	97
Solidago	56	Zostera	97
Sonchus	62	2000010	.,

LEYLAND & SON, PRINTERS, HALIFAX.





DKrib

